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World Prices, 1948 Compared With 1939

ITO: Employment and Economic Development

Earnings in Department Stores

Consumers' Cooperatives in 1947

United States Department of Labor • Bureau of Labor Statistics

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Monthly Labor Review

ITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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This Issue in Brief . . .

A GOOD DEAL of current world history is written in terms of prices and production. WORLD PRICES, 1948 COMPARED WITH 1939 (p. 467) studies two of the factors underlying world inflation: lower civilian goods production in most countries and unrelenting demand. By 1948, world production, excluding the United States, had nearly reached 1938 levels, although variations were wide among different countries (e. g., output was extremely low in Japan, Germany, Austria, Italy, and Greece). Demand is buoyed by large-scale world investment, heavy governmental expenditures, and pent-up civilian needs.

Postwar world recovery leans on many international devices. One prospective aid is the International Trade Organization Charter to be submitted to Congress for ratification in 1949. The sections of the charter of especial interest to labor are discussed in ITO: EMPLOYMENT AND ECONOMIC DEVELOPMENT (p. 476). Healthy international trade depends on world-wide maintenance of production, employment, and demand for goods. An important adjunct is maintenance of fair labor standards. The 54 organized nations signatory to the Charter did not find it easy to come to an agreement, given their divergencies of interests and traditions, and the Charter represents many compromises. Important, however, was the basic recognition that unemployment and under-employment are conditions in which all nations have a common interest and responsibility.

Probably no nation faces more serious economic problems than Great Britain. BRITISH TRADES UNION CONGRESS: MEETING, SEPTEMBER 1948 (p. 511) indicates how the British labor movement under a Labor Government reacted to some of the more compelling problems. It endorsed wage-price controls, increased industrial efficiency and production, nationalization of the steel industry, and compulsory arbitration. The Congress overwhelmingly defeated Communist-supported policies and candidates for office.

Injury of workers on the job still plagues American industry. INJURY RATES IN MANUFACTURING, SECOND QUARTER, 1948 (p. 505) reveals that more than 110,000 workers were off the job one or more days because of work injuries and that they lost a total of nearly 2¼ million man-days. Industry, labor, and government are determined to do something about it. The PRESIDENT'S CONFERENCE ON NATIONAL SAFETY, 1948 (p. 508) tells of the organizational meeting held in September preparatory to an action meeting in March 1949.

A wide range of both occupations and earnings is evident in DEPARTMENT STORE WORKERS' WAGES IN 16 CITIES (p. 483). Employees in stores varied from wrappers to sales clerks to elevator operators to carpenters; in the offices, from billing clerks to switchboard operators. About 65 categories of men's and women's jobs were studied in 16 large cities. The earnings (rounded) ranged from $17 for women porters in New Orleans to $172 for male appliance salesmen in New York City. (But within the classification of women porters, earnings were $36 per week in New York City and Seattle.) Women fitters had earnings of from $34 to $56; dress saleswomen, $34 to $53; and women selling women's accessories, $32 to $47. Male sales clerks in regular stores had earnings ranging from $33 to the peak mentioned above for appliances. In basement stores, the range for men salesmen was $41 to $105. Weekly hours worked varied from 37½ to well over 40. Most employees studied were entitled to discounts on merchandise, vacations with pay, and 6 or 7 paid holidays.

Another article related to the distributive industries is OPERATION OF CONSUMERS' COOPERATIVES in 1947 (p. 499). Co-op business and activity reached an all-time high, despite a large number of dissolutions. Among retail distributives alone, business exceeded a billion dollars; local service associations did more than 25 million dollars worth of business. Operating results, however, were less satisfactory than during the previous year, with more than 25 percent showing losses and more than 50 percent with smaller earnings. Petroleum associations generally did better in 1947 than in 1946. Wholesale groups' business and earnings were up. Productive federations also had a good year. Patronage refunds from stores averaged 3.5 percent on sales; from petroleum associations, 5.5 percent; from service groups, 4.5 percent.

The Labor Month in Review

EMPLOYMENT, WAGE, AND PRICE developments were favorable for labor in many respects during October. The continued decline in food prices brought some measure of relief to wage earners' families. Meanwhile employment maintained the high levels of recent months, unemployment fell to the lowest point of the year, and average earnings tended to increase. Fewer man-days were lost because of work stoppages than in the preceding month. Only on the West Coast, where the oil refining and shipping disputes remained unsettled, were there any major work stoppages at the month's end. Several decisions of the National Labor Relations Board handed down in October restricted union activities. The results of the November 2 elections led to the expectation on the part of labor that the country's present labor-management relations policy would be subject to revision by the new Congress.

Labor and the Elections

The recent Presidential, Congressional, and State elections are generally considered by labor to have broad implications for the future of the labor movement in the United States. Considerable credit for the reelection of President Truman and the return of Democratic majorities in the House and Senate was generally given to organized labor for its active support during the campaign. A significant number of the defeated Congressional candidates were those who were opposed by organized labor for voting for the Taft-Hartley law. In Massachusetts and New Mexico, as in the earlier election in Maine, the voters rejected legislation to ban the closed shop. The election results appear to indicate that early consideration will be given to labor-management legislation which will eliminate features of the present law regarded by labor as unfair and not conducive to good industrial relations.

Strike Situation

A downturn in the number of strikes, which is usual for the closing months of the year, again appears to be the pattern for 1948. While some increase in the number of man-days lost occurred during September, owing to several large strikes in progress, preliminary indications are that October reports will show a drop in work stoppages in numbers of workers involved and man-days lost.

The two strikes of greatest national importance, in petroleum and in shipping, were both on the West Coast. Having begun in early September, both strikes continued throughout October but partial settlements in each situation had been made by the end of the month.

In making its first ruling on strike activities under the Labor Management Relations Act, the National Labor Relations Board indicated the type of actions on the part of striking union members which would constitute "coercion." Section 8 (b) (1) (A) of the act makes it an unfair labor practice for a union or its agents to restrain or coerce employees in their right to join or not to join a labor organization. The Board divided on only one issue in the case, two members dissenting from that part of the decision which found the International (as well as the local) union guilty of unfair labor practices. The minority would dismiss the case against the International, but would apply the order to the local union.

Food Prices Down

The decline in food prices during September and October has brought some relief to hard-pressed consumers. Particularly welcome has been a more-than-seasonal drop in the prices of meat, which had risen beyond the reach of many moderate-income families during the summer. The decline of 0.6 percent in food prices, from August to September, was enough to offset increases in all the other groups, and the over-all index remained unchanged at 174.5 percent of the 1935–39 average. Preliminary estimates indicate that the October decline in food prices will more than offset rises in other retail prices to cause a decrease in the over-all index for the first time since March.

Wholesale prices, on the average, declined for the second consecutive month during October from the postwar high point of 169.4 (1926=100)

reached in August. The slight downturn during September was followed by a more significant decline in October, largely as a result of a continued decrease in the averages for farm products and foods. Throughout the recent period, the drop in prices of agricultural and related commodities has been partly offset by increases in the prices of certain durable goods, particularly metals and metal products and housefurnishings.

Price movements in recent months reflect the effects of the 1948 record farm output, the improvement in supply in many "soft" goods lines, and the continuing heavy unfilled demand for many durable goods. When prospects of bumper crops became apparent in the spring, grain prices began a steady decline which continued until support levels were approached. Livestock prices continued upward during the summer, but declined seasonally during September and October. At the end of October the wholesale price index for farm products was about 10 percent below the high point at the beginning of the year. Food prices, lagging behind farm prices, continued to rise until July and August and then declined significantly. Prices of textile products, on the average, have declined steadily, although slowly since early this year. On the other hand, prices of many durable commodities, where supplies have not met demand, have continued their postwar upward trend through October.

Wage Trend Continues

Average hourly earnings (excluding overtime) rose again in manufacturing in September, reaching a new high of $1.32 an hour. A small decrease in the average number of hours worked reported for September, largely due to the Labor Day holiday, about offset the increase in wage rates, thus holding average weekly earnings at about $54, the level of the previous month, in manufacturing as a whole. Weekly earnings in durable goods industries declined somewhat to a little less than $58 as a result of a shorter average workweek. Workers in factories producing nondurables, whose hours remained unchanged, increased their weekly earnings slightly to a little more than $50 a week.

October hourly earnings statistics will probably show another increase as a result of a number of wage raises to relatively small groups of manufacturing workers. Significant new wage contracts, however, were signed in certain nonmanufacturing industries. Approximately 175,000 railroad workers, members of the Brotherhood of Railroad Trainmen and the Order of Railway Conductors, received a wage increase of 10 cents an hour from the railroads in early October. Toward the end of the month, one of the unions involved in the West Coast maritime strike, the National Marine Engineers Beneficial Association (CIO), signed an agreement with the shipowners incorporating a 5.3-percent increase for the union. This puts the pay of the West Coast engineers on a par with those on the East Coast. An agreement was also reached by the Oil Workers International Union (CIO) and one of the companies in the West Coast oil strike. The settlement provides for a wage boost of 12½ cents an hour retroactive to July 2. The nonstriking Independent Petroleum Workers Union also negotiated increases of 12½ cents an hour for about 4,000 employees of Standard Oil Co. and Union Oil Co. in California. Telephone workers of the American Telephone and Telegraph Co. also received wage increases during the month.

Employment Changes Small

Changes in the labor force from early September to early October were relativley minor, according to Census estimates in the Monthly Report on the Labor Force. A decline in civilian employment of less than 200,000 was largely the result of additional numbers of students leaving temporary summer jobs to return to school. Unemployment also declined to the lowest rate of the year and was lower than at nearly any other time since the end of the war. Employment was still about 1 million higher than a year ago. Reflecting the entry or reentry of women into the labor market, the report shows about 600,000 more women in jobs than last year at this time.

World Prices, 1948 Compared With 1939

Price Structure and Inflation, Variations in the Existing Price Relationships, and Basic Causes of Increases

IRVING B. KRAVIS AND ANN S. RITTER[1]

BETWEEN 1939 AND MID-1948, inflation greatly altered the structure of prices throughout the world. Increases were smallest in the nations of the British Commonwealth and of Scandinavia. The United States price level had approximately doubled at wholesale and had risen somewhat less at retail, but the increases came later and were below those in most other nations.[2] Even though world agricultural output had about reached prewar levels and world industrial output had risen substantially above prewar, high postwar demands of consumers, investors, and governments could not be completely satisfied. Investment and government expenditures were often financed in part at least by increasing the supply of money or expanding bank deposits. Since total production could be increased only slowly, this additional spending power forced prices upward. Changes in the geographical distribution of production were significant. The German and Japanese economies were functioning at very low rates; at the other extreme, the United States was producing at a record peacetime rate. Large extensions of United States credits to foreign countries for postwar relief and reconstruction eased the problems created by these and other shifts.

Price increases between 1939 and mid-1948 were greatest at the wholesale level for farm products and raw materials and at the retail level for foods and textiles. Internationally traded goods increased more in price than all goods in the general wholesale average. Other changes in price relationships varied from country to country, depending upon local conditions.

Every geographical and industrial sector of the world economy has been affected to some degree by war and postwar inflation. The unequal movements of prices of various kinds and in various places—which always accompany inflation—are described here by comparing the price relationships in mid-1948 with those in 1939. The base year 1939 was selected because it marks a convenient point at the end of the era between the two World Wars and not because price relationships were necessarily "normal" at that time.

[1] Prepared in the Bureau's Office of Foreign Labor Conditions.

[2] International comparisons of price changes give only an approximate account of relative price movements in different countries, because they must be based on available price indexes. Such indexes differ greatly in purpose, method, scope, and accuracy, and thus are not strictly comparable. (For an explanation of these differences see Monthly Labor Review, January 1947 (pp. 36-38.) Generally, during periods of rapid change—such as in the last decade—price indexes actually are conservative estimates of the increase in prices. This point is particularly pertinent since many indexes include official prices predominately, even in areas where substantial shares of output are sold on "open", "gray," or "black" markets. These terms are used differently by various writers. The term "open market" is often used to refer to prices which are not subject to legal controls. A "gray market" is one in which the prices charged, although not actually illegal, are higher than they are "supposed" to be; for example, the sale of scarce commodities such as steel or automobiles at prices above those set by the manufacturer falls in this category. The term "black market" is usually used to indicate sales at prices that are above the level that may be charged legally.

Institutional factors or basic economic phenomena underlying the changes in the price level may account for differences in the extent of price fluctuation among various segments of the economy. For example, the relatively great rise in prices of building materials in the United States is attributable largely to the pent-up demand accumulated during two decades of depression and war. An illustration of the effect of institutional factors also is provided by recent United States experience, that is, in the comparatively small increases in commodity prices for metals and the durables. In these industries, prices are established largely by producers' decisions rather than by the forces of supply and demand in perfectly competitive markets; [3] high postwar output has made production very economical because overhead costs could be spread over many units of product; and business price policy, motivated by long-run considerations, has generally avoided taking full advantage of current demand (for example, automobile manufacturers' prices have been kept well under the premium prices for new cars charged by second-hand dealers). Outside the United States, the primary institutional factor affecting changes in price relationships has been governmental intervention in particular sectors of the economy through price control, rationing, subsidies, etc.

Factors Underlying World Inflation

Underlying the price increases of the war and postwar years were (1) lower production of civilian-type goods, first because of the shift of resources to the production of war goods and later because of war damage and war-incurred economic disorganization, and (2) increased demand owing to additional money income generated by expenditures first for military purposes and subsequently for reconstruction and development. High levels of demand generally resulted in full employment at an early stage in the war, and full employment, except in Italy, has characterized the postwar economies of the various nations. High-level employment has been an important factor in worldwide inflation; for, in an economy in which resources are already fully employed, an increment in demand can have little or no effect in expanding the total output of goods but is likely to rai prices. Thus, the money value of total productio increases much more than the physical volume total production. This is the essence of inflatio

Production. By mid-1948, world industrial ou put was substantially above prewar levels bu world agricultural output had probably ju reached or barely surpassed prewar levels. Recor peacetime production in the United States large accounted for the great volume of world industri production, as is shown in the following tabulation

Indexes (1938=100)

	1947		194
	Year	*Last quarter*	*First ha*
World [1]	128	135	(2)
United States [3]	210	215	21
World, excluding United States	89	97	(2)
Japan	23	25	2
Germany (Bizone) [4]	38	43	4
World, excluding United States, Japan, Germany (Bizone)	110	119	(2)

[1] Including the USSR.
[2] Not available.
[3] The 1938 base gives an exaggerated view of the increase in United State production, since 1938 output was much lower than that of 1937 or 1939. I 1937 is taken as a base United States output in the first half of 1948 was 1 percent of prewar; if 1939 is used as the base the percent is 176.
[4] 1936=100. A sharp rise in the index (from 50 to 60) occurred in July following the June currency reform.

Sources: Selected World Economic Indices, United Nations, July 19 (p. 14). U. N. Monthly Bulletin of Statistics, various issues. Federa Reserve Bulletin, various issues.

Excluding the United States, the world ha almost recovered to 1938 production levels at th end of 1947, and, since production indexes in mos countries showed an upward trend during th first half of 1948, prewar output was probably surpassed by mid-1948. However, differences were great in the degree of recovery. Output was extremely low in Japan and Germany, and Austria, Italy, and Greece had not regained prewar production levels. Soviet industrial production reached the prewar (1940) level in the last quarter of 1947, according to the Soviet delegate to the United Nations Economic and Social Council.[4] Most other countries had achieved output levels substantially above prewar. Outside the United States, increases in industrial production (between 50 and 75 percent) were greatest in Poland,

[3] See Price Behavior and Business Policy, TNEC Monograph No. 1.

[4] Supplement to Economic Report, Discussion of Report in Economic and Social Council, Sixth Session (p. 102) Department of Economic Affairs (UN).

ulgaria, Chile, and Canada, according to the blished indexes.

World output (excluding the U.S.S.R.) in the first arter of 1948 of most of the basic commodities ted below exceeded prewar production. For e most important commodities—coal, iron, d steel—this was due to great increases in United ates output. The tremendous increase in nited States production relative to that in all her industrial areas is one of the basic factors etermining the course of international economic lations. It accounts for the scarcity of dollars, d the desire on the part of many nations for nancial assistance from the United States.

The increased importance of United States tput relative to that of Europe, which may be mporary at least in part, is not the only shift in e pattern of world industrial production. For xample, the figures in table 1 showing world roduction of fuel and energy by area reveal ncreased industrialization in certain Latin Ameri- an countries, such as Argentina, Brazil, Chile, nd Mexico. Some expansion has also occurred n the Middle East, particularly in Turkey, Egypt, nd Palestine, but this is offset in the figure for sia by low output levels in the strife-ridden ar East.

	Indexes (1937=100) second quarter, 1948	
	Except U.S.S.R.	*Except U.S.S.R. and U.S.*
Coal and lignite	104	91
Crude petroleum	167	188
Electricity	187	163
Pig-iron and ferro-alloys	105	83
Steel [1]	112	83
Copper [2]	107	104
Lead [2]	85	75
Zinc [2]	106	89
Tin [3]	71	---
Rubber (Natural)	126	---
Cement	122	102

[1] Ingots and castings.
[2] Smelter production.
[3] Metal content of tin ore or tin concentrates.

Source: Monthly Bulletin of Statistics, United Nations, September 1948 (p. 3).

During the first three postwar years, agricultural production was hampered by unfavorable weather conditions and agricultural recovery in war-devastated areas was delayed also by scarcities of equipment and supplies. Food production during the crop year 1947–48 was 7 percent below prewar. Reductions from prewar levels were greatest in regions such as western Europe which generally depended upon food imports before the war. Population increases both in western Europe and in the world at large, made the need more grave.[5] Increased food requirements and smaller production have reduced total per capita food consumption, particularly in urban centers, to dangerously low levels.

TABLE 1.—*World production of fuel and energy, by area,*[1] *1938 and 1947*

Area	Production indexes (1937=100)		Percentage distribution	
	1938	1947	1938	1947 [2]
United States and Canada	86	138	41.8	54.5
Latin America [3]	99	182	4.6	6.6
Europe [4]	99	87	42.8	29.2
Asia [4]	105	108	8.7	7.3
Africa	105	151	1.1	1.4
Oceania	99	118	1.0	1.0
Total [4]	94	118	100.0	100.0

[1] Coal, lignite, crude petroleum, and hydro-electricity. For the calculations in this table, lignite, crude petroleum, and hydroelectricity were reduced to terms of coal by means of constant conversion factors.
[2] Partly estimated. Based on production during the first 9 months of 1947.
[3] Mexico, Central and South America.
[4] Excluding the U.S.S.R., for which data are not available.

Source: Economic Report, Salient Features of the World Economic Situation, 1945–47, Department of Economic Affairs, United Nations (p. 10).

In the fall of 1948, the outlook for the crop year 1948–49 seemed promising. Equipment and supplies were more readily available, although shortages still existed in many countries. Reports from Europe, the Far East, and Latin America indicated increased sowings for major crops. In the United States, 1948 crop production was estimated to be nearly 12.5 percent above the previous year, and 7 percent above the record year of 1946, according to an October forecast of the Department of Agriculture.

Demand. In view of the relatively great volume of production, the explanation of the prevailing inflationary pressure must be sought in high levels of demand. Large-scale world investment is an important source of this demand—and thus of inflationary pressure. (See table 2, showing gross

[5] The population of Europe outside of the Soviet Union and Turkey increased by 9 millions (1938–46) or over 2 percent, while world population increased by over 175 millions or nearly 10 percent (1937–47).

domestic investment expressed as a percentage of gross national product.) Such investment in 1947 took a much larger proportion of national output than before the war, in the 9 countries for which data are available.

TABLE 2.—*Percentage distribution of gross national product, 9 countries, 1938 and 1947* [1]

Country	Gross national product: Total	Expenditures by—				Investment			
		Consumer		Government [2]		Domestic (gross) [3]		Foreign (net)	
		1938	1947	1938	1947	1938	1947	1938	1947
Australia [4]	100	71	65	12	14	15	18	2	3
Canada	100	73	67	14	11	11	22	2	0
Czechoslovakia	100	81	76	13	19	[5] 6	[5] 6	0	−1
Denmark	100	78	74	8	11	13	18	1	−3
France	100	76	73	12	13	14	19	−2	−5
Norway	100	68	63	9	12	23	40	0	−15
Sweden	100	66	68	9	10	25	28	0	−6
United Kingdom	100	74	68	14	20	13	18	−1	−6
United States	100	76	72	15	12	8	12	1	4

[1] At market prices for calendar year specified; otherwise for nearest financial or calendar year for which data are available.
[2] Includes government investment for Australia, Canada, and United States.
[3] Includes government investment for Czechoslovakia, Denmark, France, Norway, Sweden, and United Kingdom.
[4] Excluding net income received from (or paid) abroad.
[5] Net.

Source: Selected World Economic Indices, Department of Economic Affairs, United Nations, July 1948 (p. 50).

Reconstruction needs and the replacement of capital not adequately maintained during the war account only partially for the large volume of postwar investment. The drive toward economic development is another factor of growing importance, both in devastated areas and also in less industrialized countries. In Eastern Europe, the Middle East, Latin America, and Africa, organized efforts are being made to develop natural resources and industry. Although the basic aim is generally to raise levels of living, the development programs differ broadly in both method and scope.

Predominantly agricultural countries of eastern Europe usually base their ambitious over-all economic plans on government ownership, at least of all important industries or all major industrial establishments. Cooperative farming operations are being encouraged in these countries with a large measure of government control. The proportion of national income used for investment is higher than in most other underdeveloped areas, and the growth of industry, transportation, and communication are being emphasized more than that of agriculture. In the Polish plan (1946–49), for example, over 20 percent of national income is to be used for investment; in the Yugoslav plan (1947–51), investment is to rise to more than [illegible] percent of national income by 1951.

In other underdeveloped areas, reliance is being placed on the stimulation of private initiative, and government ownership and operation is generally limited to selected areas of development. Many Latin American Governments, for example, have sponsored investment projects in particular fields such as electric power, transportation, or mining. Frequently, private investment is encouraged through tax concessions and direct financial arrangements for readily available credits at low interest rates. Middle East and African developmental schemes are often concerned with transportation, land-holding and irrigation, and public health and other social services. Of course, to the extent that capital equipment is obtained free or on credit from foreign sources, investment involves an inflationary pressure in the supplying country rather than in the receiving country.

High government expenditures have been another source of postwar demand. In some instances, this has been due partly to government participation in investment activity. Another major item has been military expenditure; although military expenditures have been below wartime levels, they have frequently been higher than in prewar years. This is true not only in Europe and North America, but also in the Far East, owing to civil strife. Government expenditures are larger not only in money terms but also in real terms; governments are purchasing more goods and services than they did before the war. In the United States, the United Kingdom, and the Scandinavian countries, for example, government expenditures in 1947 when revalued to prewar prices were 2 or 3 times above prewar. Furthermore, many governments not only used a larger quantity of goods in the postwar economy, but also used a larger proportion of total output (see table 2). However, in France, Greece, Italy, and Poland, government expenditures did not increase as much as prices and, therefore, government purchases of commodities and services declined.

Consumers have also contributed heavily to the large volume of postwar demand. In many countries, pent-up wartime demands, continued

[6] A Survey of the Economic Situation and Prospects of Europe (pp. 76-77), and data on these countries in International Financial Statistics, a monthly publication of the International Monetary Fund.

carcities, and rising prices have caused consumers to spend a larger portion of their increased money incomes and to save a correspondingly smaller portion of current income than before the war. Consumers have also drawn upon wartime savings to buy consumer goods.[7] Only a few countries, including the United States and Canada, have higher postwar than prewar levels of living. Elsewhere, high levels of investment and government expenditure left consumers with a share of national output either less than or at best only equal to prewar.

Lack of voluntary savings and inadequate tax revenues led to the adoption of inflationary techniques to cover part of investment and government expenditures. Investors financed their ventures directly or indirectly through the expansion of bank credit; governments met their expenses in a similar manner or by printing additional money. In either case, the increased volume of money expenditures—unmatched by an equivalent increase in aggregate output—raised prices.

Some countries, particularly in Europe, have maintained a high degree of stability in their price and wage structures by supplementing monetary and fiscal policy by direct controls, including allocations of raw materials, rationing of consumer goods, labor and wage regulations, and price ceilings. In these countries, money income was more than enough to purchase the supply of available goods at the controlled prices, and inflation was "suppressed" or "repressed."

The foreign grants and credits of the United States Government have been significant in the postwar period both at home and abroad. In the 2½-year period ending December 31, 1947, assistance was provided to foreign countries at an annual rate of over 5.8 billion dollars; the 1948 program, which includes the European Recovery Program, is estimated at 7.6 billion dollars. Outright grants accounted for 44 percent of the program for the 1945–47 period and may reach 70 percent of the 1948 total; the balance is made up of loans and credits.[8]

The immediate effect of the foreign aid program has been to increase demand in the United States and to increase supplies in the hard-pressed countries that suffered the most in the war. The long-run effect will undoubtedly be to ease price pressures both at home and abroad by raising the world's productive capacity.

Changes in Price Levels

Domestic Prices in Different Countries. At the end of World War II, world-wide inflation had affected prices in the United States less than in almost all other countries (Canada and possibly Australia and New Zealand were the chief exceptions). Yet, in the first three postwar years, United States prices increased so rapidly that the 1939 to June 1948 rise in this country was greater than that in the nations of the British Commonwealth, the Scandinavian countries, and Switzerland. In almost all other countries, price increases from 1939 to mid-1948 were greater than in the United States. The distribution of the countries with respect to price increases since prewar is given in table 3 and is summarized in table 4.

By June 1948, New Zealand, Australia, Southern Rhodesia, and the Union of South Africa were the only countries [9] of the 60 listed in which consumers' price indexes were less than 50 points higher than 1939 levels (1939=100). In nearly a fourth of these countries, consumers' prices were between 50 and 100 index points above 1939. This group included the United Kingdom, Canada, the Scandinavian nations, and the United States. The increases in wholesale prices [10] in the foregoing countries were also relatively moderate; their wholesale price indexes in June 1948 ranged from 164 in Australia to 217 in Denmark (1939=100).

Outside of North America, Scandinavia, and the British Commonwealth, price increases were much greater. In most Latin American countries, price indexes in mid-1948 were 2 to 4 times 1939 levels. In a group of European countries, including Austria, Belgium, Czechoslovakia, Hungary, Spain, and Turkey, prices were 3 to 5 times above prewar.

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[7] In the United States, for example, despite unprecedented peacetime income levels, one-fourth of all spending units spent more than their incomes during 1947 and the others saved less than in previous years. See 1948 Survey of Consumer Finance, Federal Reserve Bulletin, June 1948 (pp. 634 ff).

[8] Foreign Grants and Credits of the U. S. Government by B. W. Ruffner, Survey of Current Business, June 1948 (pp. 11 ff).

[9] Germany has been excluded from this group because the price index listed in table 3 is based on official prices. Owing to the importance of the black market, effective prices were substantially higher than is indicated by this index.

[10] Wholesale price data, for the most part, represent prices in primary markets. In general, the prices are those charged by manufacturers or producers or are those prevailing on commodity exchanges.

More advanced stages of inflation had been reached in France, Italy, Indo-China, and Japan, where prices ranged from 15 to 65 times those of 1939 and in Poland and Greece where prices were at least 160 and 300 times those in 1939, respectively. Finally, in a class by itself was China, where prices were of the magnitude of 35,000 to 45,000 times prewar levels.

TABLE 3.—*Indexes of consumers' and wholesale prices,[1] by country, 1945 and mid-1948*

[1939=100]

Index range	Consumers' price index		Wholesale price index	
	1945	June 1948	1945	June 1948
100-149	112—Germany (Br. Zone. 1938=100). 115—New Zealand. 118—Canada. 124—Australia (1938-39=100). 125—Southern Rhodesia. 127—Austria (Vienna. April 1945. April 1938=100). 129—United States. 132—Union of South Africa. 132—Venezuela (Caracas). 133—Uruguay (Montevideo). 134—Argentina (Buenos Aires). 140—Sweden. 146—United Kingdom. USSR (Rationed foods)[2]	127—New Zealand. 134—Germany (Br. Zone. 1938=100). 140—Australia (2d quarter. 1938-39=100). 142—Southern Rhodesia. 148—Union of South Africa.	106—Austria (1944). 137—Canada. 137—United States. 140—Australia. 144—Venezuela (Caracas). 148—New Zealand.	
150-199	151—Switzerland. 152—Norway. 154—Newfoundland (St. Johns) 157—Denmark. 161—Colombia (Bogota). 162—Panama (Panama City. Food. October 1939-June 1940=100). 163—Czechoslovakia (Prague). 165—Ireland. 173—Netherlands (1938-39=100). 175—Costa Rica (San Jose). 177—Guatemala (Food). 179—Spain (July. December 1939=100). 184—Peru (Lima). 185—Brazil (Rio de Janeiro). 186—Portugal (Lisbon). 196—Paraguay (Asuncion).	152—Canada. 152—Sweden. 156—Norway. 162—Switzerland. 163—Denmark (2d quarter). 167—Uruguay (May). 171—United Kingdom. 173—United States. 173—Venezuela (Caracas). (Dec. 1947). 175—Newfoundland (St. Johns). 179—Ireland (May). 186—Argentina (Buenos Aires). 198—Portugal (Lisbon).	150—Czechoslovakia. 156—Union of South Africa. 164—United Kingdom. 169—Sweden. 173—Netherlands. 174—Norway. 181—Denmark. 189—Ireland. 191—Costa Rica. 198—Switzerland. 199—Mexico.	164—Australia. 174—New Zealand. 179—Ireland (2d quarter). 179—Norway. 182—Union of South Africa. 185—Venezuela (Caracas). 188—Sweden.
200-249	205—Ceylon (Colombo. August-December 1939=100). 206—Cuba (Food). 209—Luxembourg. 213—Mexico (Mexico City). 218—Yugoslavia (January 1946). 222—India (Bombay). 227—Japan. 230—Chile (Santiago). 235—El Salvador (Food).	206—Panama (Food in Panama City. October 1939-June 1940=100). 207—Netherlands (1938-39=100). 212—Costa Rica (San Jose). 234—Guatemala (Food). 241—Yugoslavia (March). 243—Ceylon (Colombo. August-December 1939=100). 247—Columbia (Bogota).	201—Argentina (Buenos Aires). 203—El Salvador. 207—Spain. 208—Peru (Lima). 211—Chile. 214—Japan (Tokyo). 233—Portugal (Lisbon). 242—Yugoslavia (November 1946). 243—India.	202—Canada. 210—Switzerland. 216—United Kingdom. 216—United States. 217—Denmark. 220—Yugoslavia (March). 230—Costa Rica (February).
250-299	257—Palestine ("prewar"=100). 272—Iceland (Reykjavik). 278—Finland. 278—Pakistan (Lahore). 293—Egypt (Cairo).	263—Brazil (Rio de Janeiro). 272—El Salvador (Food). 275—India (Bombay. May). 279—Cuba (Food. January.) 281—Egypt (Cairo. May). 286—Czechoslovakia (Prague). 290—Spain. 292—Luxembourg	253—Belgium. 266—Ecuador. (Quito. January-June 1939=100).	234—Portugal (Lisbon). 259—Mexico. 260—Argentina (Buenos Aires). 267—Netherlands. 286—Czechoslovakia.
300-399	306—Bolivia (La Paz). 333—Belgium. 349—France (Food. Paris). 350—Turkey (Istanbul). 393—Burma (Rangoon. September-December 1946).	305—Paraguay (Asuncion. February). 312—Palestine (February. "prewar"=100). 313—Iceland (Reykjavik). 314—Mexico (Mexico City). 314—Pakistan (Lahore. May 1947) 336—Peru (Lima). 340—Turkey (Istanbul). 370—Burma (Rangoon). 374—Belgium. 378—Philippines (Manila).	317—Hungary (1944). 320—Palestine. 323—Egypt. 357—France. 366—Finland.	300—Spain (April). 309—El Salvador (March). 337—Egypt. 372—Peru (Lima). 373—Chile. 380—Palestine (February).
400-999	509—Bulgaria (Dec. 1947). 567—Iraq (Baghdad. 1946). 607—Lebanon (Beirut). 643—Iran. 740—Philippines (Manila).	USSR (Food).[3] 412—Chile (Santiago). 430—Bolivia (La Paz. December 1947). 455—Hungary (Budapest). 459—Austria (Vienna. 1938=100). 491—Lebanon (Beirut). 639—Iran. 669—Bulgaria (December 1947). 763—Iraq (Baghdad. April). 764—Finland.	440—Turkey (Istanbul). 468—Iran (Teheran). 494—Iraq (Baghdad). 551—Bulgaria.	402—India. 411—Ecuador (Quito. Jan.-June 1939=100). 413—Belgium. 452—Austria. 465—Turkey (Istanbul. Mar.). 511—Iran (Teheran). 548—Iraq (Baghdad). 562—Hungary. 795—Lebanon (Beirut. April. June 1939=100). 810—Bulgaria (December 1947) 921—Finland.

See footnotes at end of table

TABLE 3.—*Indexes of consumers' and wholesale prices,*[1] *by country, 1945 and mid-1948* —Continued

[1939=100]

Index range	Consumers' price index		Wholesale price index	
	1945	June 1948	1945	June 1948
,000 and over.	2508—Indo-China (Saigon. 1947). 4575—Italy (1947. 1938=100). 8935—Poland (Warsaw. March 1939=100). 14522—China (Shanghai). Est.—Greece (Athens. 1938=100). Est.—Hungary (Budapest).	1445—France (Paris. Food). 3291—Indo-China (Saigon). 4835—Italy (1938=100). 6523—Japan (March). 16194—Poland. (Warsaw. Dec. 1947. March 1939=100). 30505—Greece (Athens. 1938=100) 35949367—China (Shanghai).	1038—Lebanon (Beirut. June 1939=100). 1967—Italy. 74001—China.	1610—France. 4912—Italy. 6479—Japan (Tokyo). 46357009—China.

[1] For the limitations of the indexes on which these international comparisons are based, see footnote 2, p. 467.
[2] According to a BLS estimate, the index is approximately 150.
[3] According to a BLS estimate, the index is 300 to 350.

Sources: U. N. Monthly Bulletin of Statistics, International Financial Statistics, and official publications of the various governments.

In 1945, the year World War II ended, in approximately half of the countries studied, indexes of consumers' prices based on 1939 ranged from 120 to 190 and for wholesale prices from 140 to 230. Subsequently, in the countries of the British Commonwealth and of Scandinavia which have generally maintained control of prices and other aspects of economic life, price increases ranged

TABLE 4.—*Distribution of countries, by level of consumers' and wholesale price indexes, 1945 and mid-1948*

Index of prices (1939=100)	Number of countries			
	Consumers' price index		Wholesale price index	
	1945	June 1948[1]	1945	June 1948[1]
100-149	14	5	6	0
150-199	16	13	11	7
200-249	9	7	9	8
250-299	5	8	2	4
300-399	5	11	5	6
400-999	5	9	4	11
1,000 and over	6	7	3	4
Total	60	60	40	40

[1] Or latest available date.

from 2 or 3 percent in Norway, to 17 or 30 percent in the United Kingdom, depending upon whether the consumers' or wholesale price index is used.

In the United States, on the other hand, the consumers' price index rose by 34 percent between 1945 and mid-1948 and the wholesale price index by 57 percent. Except for certain Latin American countries, postwar increases in prices greater than those in the United States during this period were generally confined to countries which were having difficulty in maintaining economic stability (e. g., Italy, and France, and to select an extreme example, China).

Changes in Price Relationships

The world price structure had also altered radically by mid-1948. Some price relationships changed in response to war and postwar shifts in the world conditions of production and demand which were discussed in the preceding section; others changed in response to more localized supply and demand conditions or as a result of changes in the nature and degree of governmental intervention in the production or distribution of certain commodities.

Prices of Internationally Traded Goods. In most countries, prices of raw materials increased more than fabricated products (see table 5), and the importance of raw materials in international trade may partially explain the greater rise in export and import prices than in general commodity prices (see table 6). This seems to be attributable to large postwar demands by many nations upon raw material supplies which only recently reached or exceeded prewar levels.

These conditions favored exporters of raw material and foods such as Australia and Denmark (i. e. by raising the prices of their exports more than those of their imports), and hindered exporters of industrial goods such as the United Kingdom. Of course, this rough generalization does not explain all the figures in table 6; in some countries, such as Sweden, the selection of 1937 or

some other base year would also change the result.

TABLE 5.—*Price indexes for goods in various stages of fabrication, 10 countries, 1939–48*

[1939=100]

Country	Date	Price indexes of—		
		Raw materials [1]	Semi-finished goods [1]	Finished goods [1]
	(1)	(2)	(3)	(4)
Canada	June 1948	232		183
Denmark	do	244		201
Finland	May 1948	981		791
Ireland [2]	December 1947	209	184	180
Italy [2]	April 1948	5,173	5,265	5,261
Mexico	June 1948	288	255	
Netherlands	do	305		270
Norway	do	231		157
United Kingdom	do	306	236	192
United States	do	260	200	198

[1] Classifications of goods by stage of fabrication vary from country to country. The figures for the categories used by each country have been placed in the most appropriate of the three columns, (2) to (4).

[2] December 1939=100.

[3] 1938=100.

Sources: Official publications of the various governments.

In columns (5) and (6) of table 6, the price index numbers based on changes in prices expressed in local currencies have been adjusted in proportion to the changes in the dollar exchange rate so as to obtain index numbers that measure price changes in terms of U. S. dollars.[11] These figures indicate that prices of goods entering world trade have been somewhere between 2 to 3 times those in 1939.[12]

Changes in Commodity Groups. Another world-wide change in price relationships is the increase in textile prices relative to most other kinds of commodities. Both the clothing components of the consumers' price indexes and the textile components of the wholesale price indexes generally increased more than the all-items index during the period 1939–48. World production of cotton, wool, silk, and rayon increased steadily in the three postwar years, but in 1947–48 was still more than 10 percent below 1934–38 output. However, for cotton and wool, the position was more favorable, owing to above-normal carry-overs. Nevertheless, general inflation and the extraordinary United States consumption contributed to higher fiber prices. Mid-1948 prices of raw cotton were 4 times, and raw wool nearly double, those in mid-1939. Unsatisfied demands resulting from diversion of available supplies for military purposes and from reduced output of fibers and textiles during the war and postwar periods were still exerting upward pressures on prices 3 years after the war ended.

TABLE 6.—*Export and import price indexes, by country*

[1939=100]

Country	Date	All wholesale prices	In local currency		In United States dollars	
			Exports [1]	Imports [1]	Exports [1]	Imports [1]
	(1)	(2)	(3)	(4)	(5)	(6)
Australia	May 1948	165	396	193	337	164
Bulgaria	December 1947	810	659	651	193	191
Chile	May 1948	368		340		337
Costa Rica	February 1948	230	397	281	393	278
Czechoslovakia	June 1948	286		388		228
Denmark	do	217	267	240	273	246
Finland	March 1948	898	1,038	786	373	282
Hungary [2]	June 1948	556	850	719	245	207
New Zealand	March 1948	170	205	191	186	173
Norway	May 1948	178	296	303	257	263
Peru	June 1948	372	326	389	268	319
Portugal	May 1948	232	281		280	
Spain	April 1948	300	305	327	255	273
Sweden	June 1948	188	246	228	285	265
Switzerland [2]	do	219	250	258	253	262
Turkey	December 1947	430	434	372	196	169
Union of South Africa	May 1948	174		190		176
United Kingdom [2]	June 1948	219	252	290	208	239
United States	do	216	212	234	212	234
Venezuela	do	185		200		190

[1] Indexes in columns (3) and (4) are based on wholesale prices of export and import goods or on export-type and import-type goods. The exceptions are the figures for Hungary, Norway, Switzerland, and the United States, which are indexes of unit value of export and import trade; the export figure for New Zealand is also based on unit value.

[2] Indexes in columns (5) and (6) adjusted by percent change in exchange rate between local currencies and United States dollar. For multiple currency countries the rates used were: Official—Chile, Peru, Switzerland, Spain, and Turkey; Controlled—Costa Rica and Venezuela; Free—Ecuador.

[3] 1938=100.

Sources: International Financial Statistics and publications of various governments.

The changes in price relationships affecting farm and food prices are less clear-cut. In almost all countries the percent increase in food prices at retail is greater than in the over-all consumers' price index. Textiles and foods have thus led the consumers' price rise; the less sensitive living

[11] Most foreign currencies have depreciated in terms of American dollars. Greater domestic price increases in most countries than in the United States would have exerted downward pressure on the (US) dollar value of their currencies. In addition, world demand for American goods for postwar reconstruction and development has had the same effect.

[12] The UN Statistical Office has estimated the increase in unit dollar values of world merchandise exports between 1938 and the first quarter of 1948 to be 129 percent. See Selected World Economic Indices, Department of Economic Affairs, United Nations, July 1948 (p. 38).

costs such as rent, light, and transportation—often restrained by government controls—have increased relatively little. At wholesale, between 1939 and mid-1948, farm products in many but not all countries increased by a larger percentage than the average of all items included in the wholesale price index. However, the inclusion of certain raw materials in farm products and payment of government subsidies kept the rise in food prices below that in farm prices. In few countries outside of the United States and Canada have foods risen more than the average of all wholesale prices.

Aside from the changed position of raw materials, farm products, foods, and textiles, there have been few world-wide changes in price relationships. Lumber and wood products—and very often paper products—have increased in value relative to other commodities in many but not in all countries. For the most part, price changes in other groups of commodities have varied from country to country. Chemicals indexes, for example, increased more than the general wholesale price indexes in Sweden, Norway, Netherlands, and Finland, but less than the general wholesale price indexes in the United States, Canada, the United Kingdom, Australia, Switzerland, and France.

TABLE 7.—*Wholesale price indexes, United States and United Kingdom, 1939 to 1948*

[June 1939=100]

FOODS			INDUSTRIAL AND MANUFACTURING MATERIALS					
Item	United States	United Kingdom	Item	United States	United Kingdom	Item	United States	United Kingdom
Bacon	330	181	Aluminum ingots	76	88	Rubber (natural)	138	171
Beef	341	123	Cement	141	144	Soda bicarbonate	111	100
Cocoa	967	1,087	Coal	185	261	Steel rails	151	175
Eggs	226	228	Cotton yarn	379	287	Tin	211	250
Flour	142	174	Hides	274	398	Wool tops	235	472
Sugar	168	167	Lead	365	574			
Wheat	288	230	Nitric acid	100	119	Total	[2] 187	241
			Petroleum	256	267			
Total food	268	[1] 200	Pig iron	190	185			

[1] Food and tobacco.
[2] All commodities other than farm products and foods.

Sources: U. S. Bureau of Labor Statistics; United Kingdom Board of Trade Journal, various issues.

Local economic conditions have caused many changes in price relationships in each country. In Great Britain, for example, the smallest increase for any subgroup in the wholesale price index was for the Government subsidized meat, fish, and eggs category; between 1939 and June 1948 (1939=100), this group increased only by 56 points compared with a 116-point increase in the general index.

Changes in Individual Commodity Prices. In generalizing on changes in the prices of groups of goods, wide variations are concealed in price relationships among individual items. An illustration of the spread in commodity price changes as compared with changes in price index numbers for commodity groups is provided on a comparative basis for the United States and the United Kingdom in table 7.

For example, the price index for industrial and manufacturing materials in the United Kingdom was 241 in June 1948 (June 1939=100) but price indexes for individual commodities in this group varied from 88 for aluminum ingots to 574 for lead. A similar, though somewhat smaller, price dispersion is shown for the same group of commodities in the United States. In contrast, the dispersion of price changes in the food group tends to be smaller for the United Kingdom than for the United States, owing no doubt, to the maintenance of price controls and subsidies in the former country.

Indeed, these differences in price changes reflect a complicated set of circumstances. They include not only price controls and subsidies, but also the relative dependence of each nation on foreign and domestic sources of supply; the relative purchasing power of the two currencies in foreign markets; governmental policies with respect to tariff, etc.; and a host of other market and institutional factors.

ITO: Employment and Economic Development

PHILIP ARNOW [1]

MAINTENANCE of world productive employment and improvement of living standards are declared objectives of the Charter for an International Trade Organization, signed at Havana on March 24, 1948, by 54 nations, and scheduled to be submitted to the Congress of the United States for ratification in 1949. The Havana Charter is now being considered by the public and by the legislative bodies of many of the signatory nations. This article summarizes its employment and economic development provisions.[2]

An international trade organization—together with such other bodies as the International Bank for Reconstruction and Development, the International Monetary Fund, and the Food and Agriculture Organization—was planned as an inter-governmental agency during the war, when a pattern was being developed for postwar economic collaboration among Governments and for implementation of the United Nations Charter in the economic sphere. Experts from virtually all Departments of the United States Government, including the Department of Labor, participated in the drafting of plans which were finally issued in November 1945 as the United States Government's "Proposals for Expansion of World Trade and Employment." The Charter which emerged 2½ years later was the product of three international sessions resulting from a resolution of the Economic and Social Council of the United Nations on February 18, 1946. The first and second sessions, involving a 17-nation Preparatory Committee, were held in London during October and November 1946, and in Geneva from April to October 1947. The document was completed at the United Nations Conference on Trade and Employment, which met in Havana from November 21, 1947, to March 24, 1948. A total of 56 nations were represented at this full-scale conference; delegates from all countries except Argentina and Poland signed the Conference's Final Act. No delegate from the U. S. S. R. was present either at the final conference or at the meetings of the Preparatory Committee, although the Soviet Union had been named a member of the Preparatory Committee and had been invited to attend the Havana Conference together with all other members of the United Nations.

The ITO Charter will become effective upon ratification by 27 or more signatory nations within 1 year of the Havana Conference, or upon ratification by 20 or more nations thereafter. An Interim Commission, established by resolution of the Havana Conference, is to make studies of procedural matters to be presented to the conference of the new organization, when established.

Manyfold in purpose, the Charter recognizes certain economic principles and contains general objectives regarding economic policies of different kinds, a series of commitments concerning governmental measures affecting international trade, and the machinery for an International Trade Organization. The principles deal with the interrelationships of production, employment, economic development, and world trade. The specific commitments are varied. Chapter II of the Charter deals with the subject of maintaining high levels of employment; chapter III, with the availability of foreign capital and resources for use in the development of under- and un-developed countries, the protection of foreign investment, and the kinds of protective devices that a government can use for economic development. Chapter IV, the basic commercial policy chapter of the Charter, deals with obligations respecting most-favored-nation tariff treatment, the negotiation of tariff reduction and preference elimination, the use of quotas and subsidies, the conduct of state-trading enterprises, and technical matters of trade regulation. Chapter V concerns restrictive business practices affecting international trade; chapter VI, the principles and procedures for the estab-

[1] Of the Bureau's Division of Wage Analysis.

[2] Copies of the Charter are available from the Superintendent of Documents, as Department of State Publication 3206.

lishment of intergovernmental commodity agreements. The International Trade Organization itself, consisting of a conference scheduled to meet annually, an 18-nation executive board, special commissions, and a secretariat, is the subject of chapter VII. The organization's functions are the promotion of the general objectives of the Charter and the administration of its specific provisions, including the handling of disputes between member nations, which arise under the Charter (chapter VIII). The Charter's final chapter (IX), deals with the important question of relations with non-member nations and with such other matters as entry into force, general exceptions, amendments, and withdrawals.

Basic Economic Concepts

The economic thinkihg behind the Charter's employment and economic activity chapter (II) and economic development chapter (III) may be summarized briefly as follows:

Maintenance and growth of international trade, and the realization of the benefits to be derived from trade, depend upon maintenance and development of production, employment, and demand for goods and services throughout the world. The full growth of trade-supporting demand depends upon the domestic policies of the countries of the world being specifically or generally directed to this end, and upon the development of the potentialities and resources of the underdeveloped and underindustrialized portions of the world. The maintenance of fair labor standards is an important adjunct to this program. Widespread economic development, leading to increased productivity of both industry and agriculture, depends upon the availability of economic resources, including funds for international investment, equipment, technology, and trained personnel from the industrialized countries which are in a position to supply them.

Conversely, it is recognized that the failure of one country to maintain domestic employment and demand may contribute to serious economic difficulties in other countries and thus, to the contraction of international trade and the shrinking of its benefits. Unreasonable barriers to the international movement of productive facilities needed for developmental purposes will prevent expansion of production and demand and will perpetuate low standards of living in many parts of the world.

The Employment Chapter

In the chapter on, employment and economic activity, these concepts have, for the most part, been incorporated into the Charter in terms of the recognition of principles and objectives toward which the members of the projected Organization will strive in formulating their domestic programs. The delegates who drafted the Charter text fully realized the great divergences of opinion that exist among nations and that may exist within a single nation concerning the proper selection of domestic policies and measures. They sought, therefore, to preserve complete freedom for a variety of domestic approaches to the designated ends. Each country involved is the sole judge of the means to be used. During the international meetings which led up to the Charter, however, many countries held the document's employment provisions to be at least as important as the trade provisions, and fundamental to successful operation of the trade provisions. This view was emphasized particularly by Australia, Bolivia, Cuba, France, Mexico, New Zealand, Norway, Turkey, Uruguay, and the United Kingdom. A much-contested issue was the degree of responsibility that the nations would undertake for the actual achievement of high employment levels in their own economies.

The Charter as finally drafted reflected many compromises. A clear distinction is made in its language, however, with respect to the economic principles to which the members will give general recognition, to the actions which they undertake to perform on their own responsibility, to the obligations which they undertake to perform in consultation with other members or in conjunction with the international organization, and to the situations in which the international agency itself is given a specific function to perform. Determination of members' economic policies is left to their own best judgment.

The basic idea that the nations of the world have a common interest in the avoidance of unemployment and underemployment is set forth in article 2 as a recognition of principle. This is followed by a statement that action in this field "must depend primarily on domestic measures," but that such measures should be supplemented by concerted intergovernmental action through whatever bodies of the United Nations might

appropriately be involved, all acting under the general sponsorship of the Economic and Social Council, and each acting within its established sphere of activity.

Members of the ITO assume a positive obligation in article 3 with respect to the achievement and maintenance of "full and productive employment and large and steadily growing demand," in language generally similar to that of the United States Employment Act of 1946. The measures which the member takes shall be "appropriate to its political, economic, and social institutions." The language of the Charter further recognizes that fulfilment of these objectives may well be beyond the scope of action by individual governments and that entirely well-intentioned measures may therefore fall short of their goal. The member's responsibility under the Charter is not, therefore, the guaranteed achievement of a state of full and productive employment in its own economy but is the taking of "action designed" to achieve and maintain full and productive employment.

Action to achieve and maintain employment and to achieve high levels of demand for goods is supplemented by an undertaking to maintain fair labor standards, under article 7. This obligation is couched in terms of taking "whatever action may be appropriate and feasible" to eliminate unfair conditions of labor. A major objective in this undertaking was the elimination of unfair competition in international trade based on the maintenance of unreasonably low labor standards. In view of the prevalence of wide international differences in productivity, and in view of the primary responsibility of the International Labor Organization in this field, no attempt was made to establish any international minimum concept respecting labor conditions. The phrase "unfair labor conditions," for example, was left without definition, in full realization of the complexity of wage relationships among nations and even within a single country. Implementation of the provisions of this article is a matter of domestic action. ITO members who are also members of the International Labor Organization undertake to work through the ILO in achieving the article's objectives. The way is left open for possible appeal to the ITO itself in the event that a country's failure to maintain fair labor standards can be shown to nullify or impair another member's benefits under the Charter in the field of international trade. In the event of ITO consideration of such an appeal, the ILO is to be consulted.

To reinforce the agreed-upon principle that domestic measures relating to employment, production, and demand should be developed in relation to economic conditions in the rest of the world, the Charter also attempts to insure that measures taken to achieve full and productive domestic employment shall be of the kind which increase employment by means of trade expansion rather than by the building of uneconomic industry or an attempt at economic self-sufficiency. Thus, article 3 provides that measures taken to sustain employment, production, and demand shall be consistent with the other objectives and provisions of the Charter, which envisage a minimum and diminishing number of trade restrictions. The article provides further, in the same vein, that members shall "seek to avoid" measures which would place other countries in difficult balance-of-payments situations. And article 5 provides for the collection, exchange, and analysis of information, under the auspices of the Economic and Social Council of the United Nations, on related matters: domestic employment problems, trends and policies; national income, demand, and the balance of payments; international aspects of population and employment problems; means of promoting employment and economic activity.

A serious economic problem tackled in the employment chapter is the question of action to be taken when balance-of-payments difficulties arise and reduce a nation's ability to achieve full employment without resort to discriminatory trade regulation or trade restrictions. The focal point of discussion here was the problem of persistent surpluses of exports over imports, notably in the case of the United States. Article 4 of the Charter recognizes that in the complex international economics of the modern world, balance-of-payments difficulties arise because of a variety and often a complexity of reasons. Cause or blame cannot be attributed readily to the policies of any one nation. Sound economic policy, nevertheless, requires that all nations which may be involved in the problem cooperate to solve it, and that solutions be found favoring the expansion, rather than the restriction, of international trade. Accordingly, when a persistent excess of exports over imports in the trade of one member country is a major factor in the difficulties of other members

nd when the possibility thereupon arises that the her members will have to restrict trade with pecific countries or in specific products to preserve omestic employment, the member with the favor- ble balance of trade is to contribute to the work- g out of the common problem. Appropriate tion to extricate themselves from their own ifficulties must also be taken by the members dversely affected. The kinds of measures to be sed are, of course, to be decided by each of the overnments concerned. A more technical but elated problem involves the question of releasing country in balance-of-payments difficulties from s other obligations under the commercial policy rovisions of the Charter. This aspect of the atter is dealt with in the Charter's commercial olicy chapter (IV), in which standards and pro- edures are established for release from obligations nd for ITO review.

Beyond the problem of balance-of-payments difficulties that might occur in a period of world prosperity lay the specter of spreading world depression. The broad problem here was the question, what steps could be taken, what exceptions were to be allowed from the Charter's trade provisions, in the event of a general decline in business activity, purchasing power, and the effective demand for goods and services. Here again a major concern of many foreign delegates was the situation in the United States, and the possible international repercussions of a United States depression upon the world economy.

In the Charter as finally drafted, no provision was made for automatic waiver of basic fair-trade rules in the event of serious economic depression. Provision was made, however (in art. 5), for consultation, initiated by the ITO, with a view to the taking of "appropriate measures against the international spread of a decline in employment, production, or demand." It was further provided (art. 6) that the ITO, in the general exercise of its functions, should "have regard" to the "needs of Members" to safeguard their economies against "inflationary or deflationary pressure from abroad" by taking action within the other provisions of the Charter. In other words, the occurrence of a business depression in one country, despite every intention of avoiding it and despite every intention of avoiding its spread, might seriously affect that country's purchases from other countries.

This could make it appear to be necessary for countries adversely affected, in defense of their own employment levels, to resort to trade restrictions ordinarily forbidden by the Charter's commercial policy provisions. In such cases, the institution and maintenance of restrictions (a) requires compliance with the detailed provisions of the chapter on commercial policy (IV), which provides certain standards and review by ITO; (b) involves the basic approach and consideration of the factors mentioned in article 6; and (c) involves the dispute-settling procedures of chapter VIII. The steps envisaged under chapter VIII, in the event that a member considers any of its Charter benefits to be nullified or impaired, are consultation among the countries involved and, failing settlement, reference to the ITO's Executive Board and Conference. These bodies, if they find that a country's benefits under any specific article of the Charter have been nullified or impaired, have the authority to make recommendations to Governments, to request compliance with specific provisions of the Charter, to permit the imposition of trade restrictions (through the suspension of obligations or the withdrawal of negotiated trade concessions) when they appear to be necessary in the economic situation of a particular country, and to permit compensatory withdrawals of commitments and trade concessions.

The basic emphasis in chapter II, however, is on the positive steps that are to be taken to prevent the occurrence and spread of business depression. First, the governments agree to take action in this direction by their own direct measures supplemented by consultations under the auspices of the United Nations. Second, they agree that, if a depression does come, their actions will be of a kind that minimizes restrictions on trade and that such restrictions, when imposed, shall be subject to discussion and consultation in an international forum. The effectiveness of many of the provisions concerning employment is less dependent upon the Organization machinery than in the case of the Charter provisions respecting commercial practices, economic development, commodity agreements, and cartels. Effectiveness of the employment chapter rests largely upon the undertakings of the members who have obligated themselves to the ends already described. If these ends can be realized, it is hoped that the stage will be set for easier operation of the remaining Charter provisions.

The Economic Development Chapter

Whereas the chapter on employment and economic activity emphasizes chiefly the attainment and maintenance of full and productive employment, the chapter on economic development looks to another major source of the future expansion of world trade through raising productivity levels and realizing the potential capacity of relatively undeveloped areas. The detailed provisions of the chapter are designed to facilitate the basic pledge of the members in its introductory article (8) to develop progressively their own economic and industrial resources and to raise general levels of productivity in both industry and agriculture. This will result in increased demand for goods and higher consumption levels. Increased diversification of industrial activity within a developing country may help to increase domestic ability to withstand a decline in foreign markets. An increased level of economic activity will add specialized, low-cost productive resources and demand for the products of other countries to the channels of international trade.

No particular type of development is envisaged. Presumably, since this is a matter of domestic concern, development in some countries may concentrate on industrialization, in others on exploitation of mineral resources, and in others on the achievement of higher productivity in agriculture. In some countries, development may take the form of sizable projects in the field of transport or power; in others, already more highly developed, continuing technological progress may be less spectacular.

While the responsibility for economic development is essentially a domestic one, it is of the sort which necessarily places heavy reliance upon the capital, technical, and industrial resources of the capital-exporting countries. The ITO itself is given essentially a coordinating role with respect to the problems of development. Members in need of technical advice or financial assistance may come to the Organization for aid, and the Organization will help them find such assistance. This may, for example, involve the temporary services of private technical experts from several nations, paid for by the country receiving the service, or the collaboration of another specialized intergovernmental organization, such as the International Bank for Reconstruction a Development.

Foreign investment is one of the importa means by which development will be assiste The Charter, in article 11, obligates membe possessing capital resources to impose no unreaso able impediments to their flow, on equitable term to countries needing them for economic develo ment. It is recognized in article 12 that countri supplying investment funds and developmen resources, and countries receiving them, ha mutual obligations. The supplying countri agree not to create unreasonable barriers to th obtaining of facilities within their borders. Th capital-receiving countries agree on their part t treat foreign investment on an equitable basi The right of each country to insure that foreig investment is not used as a basis for interferenc in internal affairs or national policies is specifically recognized. The chapter permits nationalizatio of foreign-owned enterprise, provided that jus treatment is given to the former owners. Mem bers are obligated, however, to consult an negotiate respecting opportunities and securit for investment of foreign capital. The chapte also envisages the eventual formulation of a cod of fair practices concerning the conduct and treat ment of foreign investment. Such a code woul probably include labor provisions.

Protection for infant industry is an importan part of the problem of economic development The commercial policy section of the Charte (chapter IV) permits the use of both tariffs an subsidies for economic development. Use of othe protective measures, however, and particularly the use of quantitative trade restrictions or impor quotas and discriminatory internal taxes, is se verely limited. Use of protection may, of course, be appropriate if required for sound economic development. Even in such cases, the need t go beyond the use of tariffs and subsidies to the employment of quantitative restrictions is limited to special situations. The Charter's provisions are based on the principle that quantitative restrictions, once established, may be relatively more difficult to remove than other measures used for the same purpose. Their establishment not only creates protection for the domestic industry but fosters vested interests in specific directions o

trade. And not of minor importance is the fact that it is frequently impossible to distinguish protection for economic development from protection for other purposes.

Accordingly, the Charter reserves the use of quantitative restrictions, even for the purpose of economic development, to those cases in which the nature of the development problems makes the use of other devices inappropriate or ineffective. The basic rule, set forth in article 13, is that a member must obtain the prior approval of the Organization for such use.

This does not mean, however, that the Organization is given the power to review or veto the economic development plans of its members. Determination of the nature and scope of the industries to be developed is exclusively the prerogative of the member country involved. The role of the Organization is limited to the determination of the one question: Is it necessary for the member to use methods of protection otherwise prohibited by the Charter, rather than the methods which the Charter allows, to accomplish its purpose of development?

The requirement of prior approval for the use of quantitative restrictions in economic development was one of the most thoroughly debated portions of the Charter. On this question, and on many other related provisions of the Charter, the nations at the Havana Conference, and at the London and Geneva Conferences which preceded it, were sharply divided into two major groups—the so-called industrialized countries and the underdeveloped countries. The latter group contended strongly for freedom to impose restrictions subject to a provision allowing the ITO subsequently to examine the measures and to order their discontinuance. The procedures and standards finally agreed upon were designed to provide a fair balance between the possible need of an underdeveloped country to employ temporary restrictive devices for developmental purposes and the broader interests of the world in preserving a trading community free from avoidable restrictions.

In recognition of the special problems of the underdeveloped country, a series of standards is provided, which, if met by the member seeking to impose quantitative restrictions, would require automatic approval, limited in time and extent, of the member's request. Procedurally, the underdeveloped country is given the additional assurance of quick action by the Organization, which is obligated to act within a definite period of time. Moreover, if the development of an industry is threatened because the prospect of Organization approval of new restrictions results in an unusual increase in imports of the products concerned, the member involved is permitted temporarily to adopt measures to deal with the situation. However, if plans were made to restrict imports of a commodity covered by a specific trade agreement with another nation or a group of nations, their consent to the imposition of the quota would have to be obtained first. The Organization may also give approval to the institution of a new preferential arrangement otherwise prohibited by the Charter, if it is designed to foster economic development.

Other Charter Provisions

The basic purpose of the Charter, as visualized by its framers, is to permit the conduct of international trade on a reasonably orderly basis in a world of relatively full and productive employment. The two parts of the Charter—the one on employment and economic development and the other on commercial policy, commodity agreements, and cartels—are expected to complement each other and to establish a long-range basis for multilateral (rather than bilateral) and self-sustaining trade. The authors of the Charter have generally emphasized its long-range effects rather than its immediate influence in the postwar reconstruction era.

Within the sphere of commercial policy, which has been held by many in the United States to be the area of the Charter's most important provisions, it is contemplated that certain practices, notably the use of import quotas, and other practices of a kind which have not been used by the United States, would, by common agreement, be substantially barred. The Charter's provisions also call for the elimination or reduction of other restrictive trade practices, such as internal taxes which discriminate against imported goods, export subsidies, and discriminatory use of customs procedures. The Charter provides that State-trading monopolies would have to conduct their business with individual traders of other nations in a manner which allows substantial and open

competition in buying and selling, on a strictly commercial and nonpolitical basis. It provides also that the practices of international cartels would be subject to the watchful supervision of an international organization, and that intergovernmental agreements on specific commodities would be inaugurated and administered in the joint interest of both producer and consumer nations.

Tariff Negotiations

The Charter (article 17) also envisages negotiations for the reduction of tariffs and the elimination of preferences. To a very considerable degree, this objective has already been achieved, outside the scope of the contemplated organization. Concurrently with the meeting of the 17-nation Preparatory Committee in Geneva in 1947, representatives of these 17 nations, together with representatives from 6 others, negotiated a major tariff agreement. This agreement, known as the General Agreement on Tariffs and Trade, the major part of which took effect on January 1, 1948, covered about two-thirds of all world trade, and was the first major multilateral agreement on tariffs ever negotiated. United States participation was carried on under the provisions of the Trade Agreements Act. Further negotiations, involving an extension of the multilateral agreement to cover 11 additional countries, are scheduled to take place in the spring of 1949. Preparations for these negotiations, which involve inter-departmental consideration within the United States Government and will involve extensive public hearings by an inter-departmental committee, are now under way.

Public Discussion of the Charter

Thus far, there has not been extensive pub discussion of the Charter.[3] A number of importa questions have been raised concerning it. It h been argued that it may be too early in the postw reconstruction era to reach real internation agreement on trade policy; in reply to this arg ment, advocates of the Charter have said th agreement at an early date is essential to develo ment of sound postwar trade and to prevent th freezing and intensification of discriminatory pra tices. It has been argued that the specific "escap clauses" that are written into the trade provisio of the document are too wide; in reply, it is sai that they are necessary to provide reasonabl flexibility. It has been argued that the emplo ment provisions permit unwise criticism of domes tic actions in the field of employment policy b the ITO itself or through the forum offered by th International Trade Organization; it has bee stated in reply that the provisions are unmis takably clear in reserving full responsibility fo domestic action to the countries involved. Th economic development chapter has been held t provide a specific commitment by the indus trialized countries of the world to aid the under developed countries; in reply, it is stated that th chapter merely contains a recognition of principl and of intention to cooperate with no commitment regarding furnishing of resources.

[3] A series of addresses containing various viewpoints on the Charter i contained in America and the International Trade Organization, publishe by the Chamber of Commerce of the United States, June 15, 1948. See als Havana Charter for an International Trade organization, Department o State Publication 3206.

Department Store Workers' Wages in 16 Cities

KERMIT B. MOHN [1]

WEEKLY EARNINGS OF WORKERS in a group of selected occupations in department and women's ready-to-wear stores varied considerably within each of 16 cities for which studies were made in April 1948.[2] The variations among the nonselling jobs reflected differences in degree of skill and responsibility; among the selling jobs the variations resulted from the commission method of wage payment, which in its application, provided for higher earnings in some departments than in others. Workers in supervisory and administrative categories were not included in the studies.

Among women salespersons, those selling furniture and bedding were the highest-paid group in 8 of the 9 cities for which data on this occupation could be shown. These workers averaged $99.59 a week in Philadelphia, the highest earnings for any women's group among all cities. Saleswomen in women's accessories, women's dresses, and women's suits and coats departments usually constituted the largest groups of women sales personnel. The intercity range in saleswomen's average earnings in women's accessories departments was from $46.94 to $31.66; in women's dresses, from $53.31 to $33.74; and in women's suits and coats, from $59.27 to $37.14.[3] Within each city the earnings in suits and coats departments were above those in women's dresses, which, in turn, were higher than those in women's accessories. In 7 cities, the weekly earnings of women selling women's suits and coats were above $50; only 2 cities showed averages below $40. In women's dress departments, weekly earnings in 2 cities exceeded $50, in 8 fell between $40 and $50, and in 6 others were below $40. In women's accessories, saleswomen received over $40 a week in only 3 cities, and in all others averaged between $30 and $40.

Women selling notions and trimmings were at the bottom of the earnings ladder for sales personnel in 10 cities. The highest average earnings for these workers was $38.32 and the lowest $26.71, among the 16 cities. In a few cities, blouse and neckwear saleswomen had the lowest earnings, and, in a few others, some of the basement stores had the lowest-paid saleswomen.

Among the women's nonselling group of occupations (other than office workers) fitters of women's garments generally had the highest earnings, with a range among the 16 cities from $56.25 in New York to $33.78 in New Orleans. In all, workers in 3 cities had average earnings above $50 for this occupation, and in 6 others the average exceeded $40. Generally, two other occupations which accounted for relatively large numbers of workers—passenger elevator operators and cashier-wrappers—were considerably lower in the earnings scale. The city averages for passenger elevator operators ranged from $39.59 in Pittsburgh to $19.11 in Atlanta, and for cashier-wrappers, from $36.27 in Oakland to $22.45 in New Orleans.[4] Average weekly earnings amounted to at least $30 for both jobs in only 8 cities. In those cities in which sufficient numbers of women porters (cleaners) and stockmen were found to warrant publication of their earnings, the levels for these jobs were frequently at or near the bottom of the wage structure.

[1] Of the Bureau's Division of Wage Analysis. The collection of data for this study was directed by the Bureau's regional wage analysts. More detailed information will be available in a mimeographed report.

Surveys were made in 16 selected cities: Atlanta, Boston, Chicago, Dallas, Denver, New Orleans, New York, Oakland, Philadelphia, Pittsburgh, Portland (Oreg.), Providence, St. Paul, Seattle, Toledo, and Washington, D. C. The scope of the surveys included department stores and women's ready-to-wear stores (corresponding to industries 5011 and 5121 of the Standard Industrial Classification Manual issued by the U. S. Bureau of the Budget), employing more than 100 workers.

[2] All earnings data exclude premium pay for overtime work and pertain to regular full-time workers only; part-time workers and contingents were excluded from the survey. Weekly earnings for straight-salary workers are those that were in effect in April 1948. For commission workers, the commissions were averaged over a 12-month period wherever possible.

[3] Unless otherwise stated, earnings of sales personnel refer to those in regular or upstairs stores.

[4] Data could not be shown for cashier-wrappers in one city.

Among office workers, women general stenographers averaged $43.01 in the highest-pay city for the occupation; the average in 4 other cities was above $40, and the lowest figure was $31.72. Comptometer-type calculating machine operators had averages falling within the $30–$40 bracket in the 15 cities for which data in this occupation were shown.

Men selling major electrical appliances were the highest-paid workers in 9 of the 16 cities, those selling furniture and bedding were at the top level in 5 others, and floor coverings and men's clothing salesmen, each led in one. Major electrical-appliance salesmen averaged more than $100 a week in 9 of the 16 cities; furniture and bedding and floor coverings salesmen exceeded this figure in 5 cities. The highest average for appliance salesmen was $172.33, in New York, for furniture and bedding salesmen, $147.57, also in New York. Floor-coverings salesmen in Pittsburgh, averaging $117.85, led all others in that classification. Men's clothing salesmen, among 15 cities for which data were shown for this occupation, had weekly earnings ranging from $119.20 to $58.64, with the averages in 3 cities exceeding $100 and in 5 being between $80 and $100. Men's furnishings salesmen showed substantially lower earnings; the highest city average was $64.66 and average earnings in the other cities ranged down to $33.35. Only 7 cities showed averages in excess of $50 for this occupation.

Men porters (cleaners), constituting a relatively large nonselling group in all cities, averaged slightly more than $25 a week in 2 cities, between $30 and $40 in 10 cities, and over $40 but less than $45 in the other 4. Stockmen (selling sections), another numerically important group, had average earnings of less than $40 in all except 2 cities (data not available for 1 other). Furniture finishers averaged more than $40 a week in all cities; in fact, the average exceeded $50 in 10 cities; with 4 being above $60. Maintenance carpenters (usually the highest-paid nonselling job studied) in 3 cities had average weekly earnings exceeding $80, in 7 others they averaged between $70 and $80, and in the 4 others for which data could be shown they averaged above $60 a week.

Average weekly earnings are shown in the table on page 486 for a varying number of store (excluding office) occupations, ranging from 27 in Providence to 50 in New York and Philadelphia. However, the subsequent analysis of intracity and intercity variations in earnings is limited to 16 occupations [5] for which averages could be shown in each of the cities.

The majority of the 16 occupations showed weekly average earnings of less than $50 in all cities except Chicago. In 7 of the cities, averages were below $40 for a majority of the occupations. On the other hand, the averages for at least 8 occupations exceeded $70 in 14 cities.

The extent of range of the occupational averages among the cities showed considerable variation. Differences between the lowest- and highest-pay cities amounted to between 40 and 70 percent in 9 of the 10 women's occupations; in one other, elevator operators, the highest-pay city exceeded the lowest-pay by 107 percent. The intercity variations among the 6 men's occupations were somewhat greater than those found among women's occupations. The minimum earnings differential amounted to 70 percent for porters while the maximum equaled 162 percent for major electrical appliance salesmen.

The highest earnings levels among the 16 occupations were recorded in Chicago in 4 jobs; in New York, Oakland, and Pittsburgh, in 3 jobs each; in Dallas, in 2 jobs; and in Denver, in 1 job. Based on a ranking of all 16 jobs, Pittsburgh led all other cities, with Chicago taking second place, and New York, third. The remaining cities in their order of ranking were Oakland, Dallas, Philadelphia and Portland (which were tied for sixth place), Denver, Seattle, Toledo, Washington, St. Paul, Boston, New Orleans, Atlanta, and Providence. A comparison of earnings in 33 store occupations in Pittsburgh, Chicago, and New York produced the same results, insofar as ranking among the top 3 cities was concerned. However, the difference between Pittsburgh and Chicago was very slight; for selling jobs only, the latter city had the advantage.

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[5] Included are the following women's occupations: elevator operators; fitters, women's garments; and saleswomen in these departments—bedspreads, draperies, and blankets; blouses and neckwear; men's furnishings; notions; piece goods; women's accessories; women's dresses; and women's suits and coats. Men's jobs included furniture finishers, porters, and salesmen in floor coverings; furniture and bedding; major appliances; and men's furnishings.

Average weekly earnings [1] of workers in department and women's ready-to-wear stores in selected cities, April 1948

Sex and occupation	Atlanta	Boston	Chicago	Dallas	Denver	New Orleans	New York	Oakland	Philadelphia	Pittsburgh	Portland, Oreg.	Providence	St. Paul	Seattle	Toledo	Washington, D. C.
Women—store																
Cashier-wrappers	$27.03	.....	$36.06	$28.22	$30.70	$22.45	$35.42	$36.27	$28.38	$35.15	$32.65	$28.33	$28.60	$32.93	$31.88	$30.47
Elevator operators, passenger	19.11	$27.37	34.58	25.90	30.61	20.79	35.34	37.03	39.41	39.59	34.91	27.87	27.68	35.50	33.40	28.33
Fitters, women's garments	36.20	37.66	52.08	53.22	42.54	33.78	56.25	44.66	38.96	48.71	35.40	36.54	36.09	43.88	40.50	41.21
Packers, bulk	.....	.....	34.79	.....	35.23	.....	37.27	37.84	30.54	51.25	35.42	.....	.....	39.29	.....	.....
Porters, day (cleaners)	17.52	.....	.....	21.48	.....	16.85	36.11	.....	31.69	.....	.....	28.77	.....	36.14	.....	26.41
Receiving clerks (checkers)	28.00	31.54	.....	27.80	31.16	25.82	34.13	37.59	30.02	.....	39.02	.....	31.62	34.21	.....	.....
Sales clerks (regular or upstairs stores):																
Bedspreads, draperies, blankets	30.12	32.04	43.77	41.89	36.66	37.28	42.81	43.41	38.37	43.85	42.54	32.77	39.61	37.55	40.88	36.95
Blouses and neckwear	30.57	30.42	50.63	45.56	37.07	32.94	36.23	40.15	33.16	38.42	40.84	29.70	31.99	34.77	34.17	32.78
Floor coverings	.....	49.53	.....	.....	77.73	.....	.....	47.75	70.61	.....	.....	37.96	.....	67.83	.....	.....
Furniture and bedding	.....	.....	75.78	98.88	46.00	.....	.....	44.82	99.59	73.64	71.81	.....	.....	64.40	.....	73.95
Housewares	30.41	33.97	42.34	36.21	39.15	30.95	41.30	41.11	34.68	40.38	40.09	.....	34.81	35.08	37.27	34.80
Major appliances (refrigerators, stoves, washers, etc.)	.....	.....	.....	.....	40.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Men's furnishings	31.18	31.44	41.90	45.77	47.59	31.18	38.89	41.88	37.64	42.05	41.73	32.06	36.92	35.49	37.19	39.84
Notions, trimmings	26.71	29.57	37.33	32.01	33.88	26.73	37.17	38.32	32.66	36.96	33.68	28.86	29.33	32.85	34.63	33.16
Piece goods (yard goods, upholstery fabrics)	29.38	31.55	47.80	40.83	38.29	32.99	47.64	42.44	38.53	41.55	39.79	30.67	35.38	38.71	37.31	35.93
Silverware and jewelry (excluding costume jewelry)	34.21	.....	51.05	53.10	50.96	34.05	51.79	39.61	39.33	40.76	41.60	.....	40.53	37.23	38.49	.....
Women's accessories (hosiery, gloves, handbags)	32.37	31.73	41.07	46.94	38.42	32.51	38.73	40.75	34.66	39.02	38.91	31.66	33.33	34.48	36.87	33.74
Women's dresses	42.29	33.74	53.31	51.81	40.36	41.95	46.41	45.60	43.14	41.42	41.02	34.35	37.36	34.52	36.94	37.37
Women's shoes	35.96	.....	62.87	54.22	47.15	43.40	56.19	52.58	50.38	52.23	46.68	37.19	.....	43.37	48.09	48.35
Women's suits and coats	43.72	40.32	56.30	59.27	47.96	44.39	50.09	51.93	51.62	57.96	50.11	37.14	40.96	46.27	49.58	38.64
Sales clerks (basement stores):																
Bedspreads, draperies, blankets	.....	33.06	.....	.....	45.35	.....	.....	.....	.....	41.14	42.23	.....	.....	.....	.....	.....
Blouses and neckwear	.....	.....	.....	.....	.....	.....	36.94	.....	.....	37.57	.....	.....	.....	.....	.....	.....
Housewares	.....	.....	.....	.....	36.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Men's furnishings	.....	.....	.....	.....	.....	.....	40.13	.....	39.02	42.91	.....	.....	.....	.....	36.47	.....
Piece goods (yard goods, upholstery fabrics)	.....	.....	.....	.....	35.02	.....	.....	.....	34.34	.....	.....	.....	.....	.....	.....	.....
Women's accessories (hosiery, gloves, handbags)	.....	.....	.....	.....	33.21	.....	38.69	.....	36.73	36.81	.....	.....	.....	.....	36.61	.....
Women's dresses	33.18	.....	52.88	28.70	36.11	.....	38.90	.....	41.21	38.99	.....	.....	.....	.....	36.94	.....
Women's shoes	.....	.....	61.15	.....	.....	.....	51.21	.....	44.93	44.39	.....	.....	.....	.....	.....	.....
Women's suits and coats	37.55	.....	49.48	.....	43.32	.....	45.24	.....	48.31	47.13	.....	.....	.....	.....	.....	.....
Stockmen, selling sections	19.16	.....	33.11	27.55	31.16	20.15	32.94	.....	26.64	33.46	33.18	29.16	.....	32.18	.....	.....
Tailors, alterations, men's garments	31.28	.....	.....	31.76	44.60	.....	.....	.....	.....	.....	.....	.....	.....	56.50	.....	.....
Tailors, alterations, women's garments	27.56	35.30	38.78	31.50	31.38	25.21	40.32	39.93	35.78	.....	50.32	35.75	29.68	37.49	36.83	.....
Women—office																
Billers (billing machine)	.....	[2]	40.05	34.65	31.71	36.38	39.36	41.23	34.76	38.26	.....	.....	.....	38.65	37.17	36.04
Billers (bookkeeping machine)	.....	[2]	.....	.....	32.10	.....	40.00	.....	.....	.....	38.23	36.19	33.45	.....	36.06	.....
Calculating-machine operators (Comptometer-type)	34.65	[2]	39.88	34.41	33.45	31.77	39.53	39.43	32.71	32.61	37.47	32.76	34.63	36.80	36.74	39.38
Calculating-machine operators (other than Comptometer-type)	.....	[2]	.....	.....	.....	.....	39.29	40.81	.....	.....	.....	.....	.....	.....	.....	.....
Clerks, pay roll	37.74	[2]	39.86	38.15	38.55	34.38	42.88	41.56	35.40	42.27	40.00	39.82	37.81	40.66	38.94	37.17
Stenographers, general	41.47	[2]	43.01	38.11	36.14	35.08	41.27	41.58	33.43	37.70	39.65	31.72	37.21	38.46	38.67	41.64
Switchboard operators	29.76	[2]	37.40	31.46	35.33	29.48	38.57	39.23	32.42	38.24	37.95	31.02	30.88	36.94	35.09	36.95
Men—store																
Carpenters, maintenance	.....	65.72	74.76	73.91	77.29	68.25	69.33	80.58	81.24	83.81	76.61	.....	73.28	79.96	61.62	70.00
Elevator operators, passenger	22.57	.....	.....	30.80	29.26	.....	40.46	.....	39.81	43.17	.....	.....	.....	38.80	.....	.....
Finishers, furniture	42.19	48.89	53.76	46.14	57.43	45.14	56.38	72.56	49.29	66.64	70.10	59.00	57.17	63.19	54.78	47.63
Fitters, men's garments	.....	54.03	69.31	.....	63.14	.....	71.67	.....	60.95	63.18	74.40	.....	54.42	.....	.....	66.73
Fitters, women's garments	.....	62.20	.....	.....	.....	.....	76.49	.....	.....	.....	.....	.....	.....	.....	.....	.....
Packers, bulk	28.45	35.23	38.69	31.35	36.62	30.47	41.14	42.30	36.43	51.16	47.72	32.94	38.70	45.72	37.32	.....
Porters, day (cleaners)	25.54	34.30	38.74	30.24	33.34	25.44	39.22	43.16	38.21	40.63	38.91	34.34	32.89	40.40	42.07	30.22
Receiving clerks (checkers)	34.22	33.61	39.90	34.62	42.36	32.21	38.48	50.99	37.27	50.87	49.76	36.10	40.73	46.40	.....	35.23
Sales clerks (regular or upstairs stores):																
Bedspreads, draperies and blankets	.....	39.64	60.45	51.14	58.86	52.09	53.27	43.73	56.43	.....	.....	.....	.....	.....	.....	.....
Floor coverings	70.79	76.99	89.96	98.46	86.38	66.34	110.54	100.75	114.72	117.85	87.96	69.21	100.37	82.71	84.64	87.47
Furniture and bedding	81.87	99.39	90.69	105.67	84.86	83.85	147.57	89.55	122.94	122.55	88.03	71.70	87.62	84.97	93.84	105.46
Housewares	.....	33.21	53.01	.....	.....	.....	45.53	.....	41.87	.....	.....	.....	.....	45.00	.....	50.72
Major appliances (refrigerators, stoves, washers, etc.)	111.88	96.15	114.18	109.30	94.40	99.05	172.33	93.59	104.37	128.79	104.04	65.67	100.84	106.68	91.39	94.57
Men's clothing	62.29	81.37	92.10	94.54	95.09	63.09	100.11	61.19	105.50	119.20	61.77	.....	58.64	79.19	79.63	85.63
Men's furnishings	40.60	36.80	64.66	63.81	58.45	42.43	50.45	49.82	56.18	50.57	46.55	33.35	41.95	48.33	43.08	58.79
Piece goods (yard goods, upholstery fabrics)	.....	38.39	60.17	.....	.....	.....	50.15	47.92	.....	.....	.....	.....	.....	.....	.....	.....
Women's shoes	54.30	.....	70.18	66.48	58.22	48.13	88.67	63.97	60.12	63.65	60.08	48.56	52.26	54.11	.....	63.11
Sales clerks (basement stores):																
Floor coverings	.....	.....	.....	.....	.....	.....	86.67	.....	82.01	66.66	.....	.....	.....	.....	.....	.....
Furniture and bedding	.....	.....	.....	.....	.....	.....	.....	.....	105.14	.....	.....	.....	.....	.....	.....	.....
Men's clothing	50.30	.....	78.47	.....	59.11	.....	73.61	.....	95.66	.....	.....	.....	.....	.....	.....	.....
Men's furnishings	.....	.....	.....	.....	.....	.....	40.50	.....	41.06	.....	.....	.....	.....	.....	.....	.....
Women's shoes	.....	.....	62.74	.....	.....	.....	57.85	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stockmen, selling sections	31.27	28.57	37.70	28.92	32.59	28.29	35.33	44.95	30.70	39.70	39.39	.....	34.32	41.98	33.36	30.29
Stockmen, warehouse	32.91	.....	.....	33.12	43.37	30.77	42.83	53.68	40.15	50.74	48.68	35.97	42.69	45.47	52.80	33.02
Tailors, alterations, men's garments	39.69	.....	58.22	51.35	54.60	28.75	56.43	69.69	52.53	58.35	67.86	.....	.....	64.56	.....	58.36
Tailors, alterations, women's garments	.....	48.39	.....	67.99	50.77	.....	62.90	.....	53.51	57.92	.....	54.58	.....	.....	.....	58.45

[1] Excludes premium pay for overtime work and pertains to regular full-time workers only; part-time workers and contingents were excluded from the survey. Weekly earnings for straight-salary workers were those in effect in April 1948. For commission workers, the commission earnings were averaged over a 12-month period wherever possible.

[2] Not available.

Related Practices and Supplementary Benefits

A 40-hour workweek was scheduled for full-time employees in all establishments studied in Atlanta, Denver, Oakland, Seattle, and Toledo. Furthermore, this schedule was in effect in a majority of the stores studied in Chicago, New York, Philadelphia, Pittsburgh, and Washington. Regular workweeks of more than 40 hours were scheduled in a majority of the stores in New Orleans Portland, and St. Paul. In Boston, 7 stores had a 40-hour week, a similar number had shorter workweeks, scattered between 35 and 40 hours, and 4 others had workweeks exceeding 40 hours. Three Dallas stores had a 40-hour week, 3 were on a 45-hour basis, and 2 had a workweek of less than 40 hours. Half of the Providence stores observed a 40-hour week while the other half had weeks ranging from 37½ to 39½ hours. New York was the only city besides Boston and Providence in which a substantial proportion of the stores had workweeks of less than 40 hours. Of the 15 New York stores in this category, 11 had a 37½-hour week.

Full-time employees' regular working hours tended to be grouped into a fixed number of days per week in definite city patterns. All establishments studied in Providence and Washington, all except 1 in Oakland, all but 2 in New York, and a majority in Boston, observed a 5-day employee workweek. A 6-day week was reported in all Denver, St. Paul, and Seattle stores, all except 1 of the New Orleans, Pittsburgh, and Portland stores, and a majority of the Chicago and Philadelphia stores. A 5½-day week predominated in Atlanta and Toledo, and was observed in half of th Dallas stores.

Discounts on merchandise purchased by em ployees were granted by all stores studied except in New York. Generally, for full-time worker these discounts ranged from 10 to 20 percent o all types of goods. In some cases, stores gran ing 20 percent on wearables allowed a smalle discount on nonwearables. New York was th only city in which a substantial number of store reported discounts of more than 20 percent.

Vacations with pay to full-time employees wer provided by all stores except one in New Orleans Many stores granted vacations after 6 months o service. All except one store in New Orleans an one in Dallas provided vacations after 1 year o service. One week of vacation after a year' period was predominant in most of the cities although in all of them except St. Paul and Toledo some stores granted a 2-week vacation. A 2 week vacation after 1 year of service was in effect in a majority of establishments in Boston and Providence. Most of the stores in all cities except St. Paul increased the vacation time to 2 weeks after 2 years of service, and some stores in a few cities provided longer vacations after more than 2 years of service.

Paid holidays, varying in number among the individual stores, were provided for store and office workers in all establishments studied in 11 cities. In four cities, a majority of stores provided paid holidays, and, in one city, less than half of the stores had this feature. Most frequently, six or seven holidays were provided. Providence was the only city in which a majority of the stores provided more than seven holidays.

Summaries of Special Reports

Collective Bargaining Provisions of Special Interest

FROM OVER 12,000 labor-management agreements, the Bureau of Labor Statistics has been assembling typical contract provisions on a number of important subjects.[1] These include basic provisions on wages and hours, fringe issues, such as paid vacations, and varied phases of employee-employer cooperation designed to improve the workers' position and to raise production. This study was undertaken in response to recurrent demands for a handbook of sample contract clauses that exemplify the results of current labor-management negotiations. No special attempt was made to determine the prevailing industry practice or the most frequently used provisions. Instead, the objective was to present a wide variety of clauses, in convenient form, thereby assisting negotiators to reach settlements that are well adapted to their particular needs.

Two chapters of the Bureau's bulletin on Union Agreement Provisions which have been chosen for summary deal with (1) union-management cooperation, plant efficiency, and technological change and (2) promotion, transfer, and assignment. A few of the exact agreement clauses are quoted to exemplify the points made in the text. Under existing conditions of high-level employment, when the pressure for production is great in order to meet both domestic demand and foreign commitments, information on such contract clauses is especially useful.

[1] Information is from Bulletin No. 908, entitled Collective Bargaining Provisions, prepared in the Bureau's Division of Industrial Relations. Individual chapters of this bulletin are released in mimeographed form in advance of printing. As of October 15, 1948, a total of 18 chapters were available, with approximately 10 additional chapters scheduled for release during the fiscal year 1948-49. Two chapters are summarized in this article and others will appear in later issues of the Monthly Labor Review.

Cooperation in Promoting Output

Sound collective bargaining and an effective procedure for settling employee grievances are usually relied upon by employers and unions to produce harmonious labor relations, and thereby to increase production and plant efficiency. Less frequently, one or both of the parties pledge specific cooperation either on an informal basis or through a joint committee. Agreements rarely contain detailed plans of cooperation. Participation by labor and management is common in joint committees organized for the elimination of wasteful methods of operation and plant inefficiency in general; the introduction of new machinery or processes; the formulation of programs to stimulate sales; and for improvement in the competitive position of the plant. Provision is less frequent for the loan of union funds to the company; the services of union specialists in production problems; or collaboration for legislation favorable to the industry. Some cooperation clauses are general, providing for joint discussion of mutual problems outside the scope of the grievance procedure; others reflect some particular facet of a production, manpower, or allied problem.

Plant efficiency clauses may be directed chiefly or solely toward insuring management efficiency. This type of provision is most prevalent in plants operating under a piecework or incentive system where workers bear much of the burden of inefficiency and have their earnings adversely affected by the use of obsolete machinery and equipment, and by inefficient routing of work and other delays. For these reasons, some union agreements specifically make the employer responsible for maintaining modern and efficient working equipment and for providing adequate facilities and supervision.

A number of agreements enlist the active support and cooperation of the union (and its

members) in the maintenance and improvement of production and allied activities. Most of these union pledges are aimed at the elimination of plant inefficiency. Some reflect concern for the industry's welfare. The union may assume certain specific responsibilities: to prevent or not to condone restrictions on output; to correct inefficiencies of its members; to uphold company rules; to combat absenteeism; to conduct sales campaigns; to maintain plant safety and sanitation. Other more general terms adopted cover the achievement of low-cost and efficient operations and the maintenance of profitable and productive efficiency.

Detailed Pledge by Union for Itself and Its Members: Efficiency, Production, Quality, Conservation

Recognizing that the welfare of its employees and their opportunities to earn a living depend upon the success and prosperity of the company and further recognizing that the various wage increases provided for in this agreement are of a substantial nature, the union hereby pledges for itself and all its members—the employees of the company—that they will perform their work effectively and efficiently to the best of their ability, and will cooperate in the introduction or installation of such processes, machinery, changes in or introduction of new methods of operation, incentive pay plans or systems, and job classification and evaluation plans or systems as the company may introduce or put into effect for the purpose of better and more efficient operation to the end that the company may increase production and reduce costs so that the company may adequately meet competitive conditions, and maintain employment * * *. The union further pledges for itself and its members that they will fully cooperate in the following: The reduction of shrinkages of all kinds; in the saving of materials, tools, machinery, equipment and all company property by means of careful handling and use; in minimizing breakage and losses of any kind caused by careless handling; in maintaining a high standard of quality in all products through efficient and careful workmanship; in aiding in the enforcement of all factory rules, regulations, safety and health measures; and in cooperation to the best interests of the union and the company.

Joint committees or boards dealing with union-management cooperation are usually permanent, both sides are equally represented, and meetings are held at regular, specified intervals. Such committees are generally advisory; some agreements appear to grant them additional authority, and others make no reference to their powers. Their scope varies from a single or specified function or activity to a more inclusive or even general jurisdiction in matters of mutual interest. Some committees are industry-wide and others cover a particular plant only. Others are limited to specific issues named: plant production and efficiency, elimination of waste, improvement of quality, elimination of absenteeism, safety and sanitation, and suggestion systems. In certain instances, the scope is quite broad: Develop guaranteed wage or employment stabilization plans for the plant, study industry stabilization, the causes of stoppages, industry problems, and the effect of multiple-shift use of machinery on employment; develop and implement an industry promotion plan; develop a program to eliminate unfair, nonunion competition and practices undermining the industry's labor standards.

Labor-Managment Production Committee to Effectuate Maximum Production.

It is hereby agreed that a committee consisting of three (3) representatives of the company and three (3) representatives of the Union to be known as the Labor-Management Production Committee, shall be established and meet periodically to discuss ways and means to effectuate maximum production, which is mutually desired. It shall also be a function of this committee to review the wage scale every three (3) months with a view to upgrading the employees in the lower brackets of the several classifications.

Cooperation on Technological Changes

Union-management cooperation in improving productive efficiency is predicated on acceptance by the employer of the principle that the workers' jobs, earnings, and standards of working conditions will be safeguarded. The immediate effect of technological changes on employment are often unpredictable. Traditionally, workers have associated such changes with the loss of jobs, lowered earnings, and loss of skills acquired through long years of training and experience; this is largely responsible for the antagonistic attitude of many workers and their unions to the changes themselves.

Recently, however, the trend has shifted more and more from outright opposition toward acceptance of technological changes, provided the union is given a voice in bargaining over employment conditions resulting from the change. Through cooperation, unions and employers have attempted to remove such opposition by providing the workers an opportunity to share in any resulting economies. An important problem has been to

volve methods which will reconcile, as far as ossible, the continual growth of industrial techiques and of labor-saving devices with employent security. Some companies have voluntarily pread the introduction of machinery and other bor-saving devices over a long period of years. thers have made the changes in periods of inreased production.

Some agreements require union-management negotiations prior to any changes in the process of peration or in the equipment used. Other agreements specifically prohibit any restriction upon ew machinery or processes and even pledge the nion to active cooperation in the introduction of echnological changes.

In some agreements, management's right to nstitute technological changes is explicitly recogized or it is stated that use of machinery or laborsaving devices shall not be restricted. Other references to management rights or prerogatives may be interpreted as including the right to institute new processes, labor-saving devices, and new equipment. However, the language used is rather broad or general.

Union Recognizes Company Right to Install More Efficient Equipment. Cooperation on Performance Pledged.

The union agrees that it is the sole responsibility of management to decide on such matters as improvement in equipment, methods, process, materials, supplies, etc., in order to maintain a good competitive position. The union further agrees that its officers and members will cooperate with the company's efforts to maintain high standard of performance from the standpoint of quality and quantity of work. Also, it is recognized by the union that the company has the right at all times to install better and more efficient equipment, methods of handling work, or work schedules as may be developed.

A number of agreements require that technological changes shall be discussed in advance with the union, or that the union shall be notified in advance of contemplated changes. In some instances, advance union approval is required. Some agreements provide for joint designation of the particular workers who are to operate the new machinery.

Advance Discussion With Union Before Installation of Technological Change. Employer May Initiate Change for Trial Period, Subject to Negotiation and Arbitration if Union Disagrees.

Management shall first inform the union of the fact that a change is to be made, of the approximate date of its installation, the nature thereof, proposed duties and job assignment, and the expected earnings on a mutually agreed upon form. The parties shall meet and discuss the proposal at least two (2) weeks before the day fixed for the institution of such change. The employer will furnish all information which is necessary to a complete understanding of the proposed change.

The employer may install the proposed change for a trial period of four (4) weeks which may be extended by mutual agreement. During such trial period, the employees shall be paid no less than their previous average hourly earnings for the previous quarter, as established by the Social Security records. In the event final agreement during or subsequent to the trial period results in higher rates of pay, the employees shall be paid retroactively to the date of assignment to the job. Within fifteen (15) days of the expiration of the trial period the union, if dissatisfied, may present a written statement of its grievances, and if same shall not be satisfactorily adjusted by negotiations between the parties within five (5) days thereafter, the matter may be submitted by the union to arbitration for final and binding decision.

Union participation in the introduction of technological change is most frequent in the establishment or revision of rates and work loads because of changed job requirements (particularly under a piece-rate or wage-incentive system). Agreements often provide for rate revision, if the workers' productivity is substantially affected by a direct change in technical conditions.

Generally, management notifies the union of the proposed changes and then negotiates with the union on all matters affected. In some instances, the notification to the union must contain details of all the changes proposed—rates of pay, work load, etc. The results of the negotiations are tried, and any differences remaining after further and final negotiation are often arbitrated. Negotiation after the trial period is not always provided; under some agreements union action is specifically channeled through the grievance procedure.

Protective measures to minimize labor displacements due to technological change vary considerably. They include (1) the prohibition of dismissal and (2) the transfer of workers from the job or machine which has been eliminated by the change to the new job created. Usually, such transfer is accompanied by agreement upon some definite wage policy on the new job.

Retraining of workers made necessary by technological change is sometimes provided, usually at the employee's regular rate of pay. If the change reduces the number of jobs, employees affected may be transferred to different jobs in order to avert lay-off; sometimes the necessary

training is given for such jobs. If vacancies are not available, displaced workers may be given priority in filling any future vacancies. For workers actually displaced, dismissal pay is sometimes specified.

Trial Period Specified Before Setting New Rates. Retroactivity Established.

In placing into operation any new machinery, apparatus, process or equipment in existing plants covered by this agreement, a trial period of production, not to exceed four (4) months, will be permitted to elapse before the new wage rates are established. When such new rates are established the same will be retroactive to the date when such new jobs or processes were placed into operation.

Promotion, Transfer, and Assignment

Promotion, transfer, and assignment clauses establish the basis or methods of shifting employees from one job to another which are consistent with employee security and plant efficiency. Such clauses attempt to reconcile the employer's right to select employees for promotion or transfer and the employee's request for promotion and transfer. To be promoted a person need not be doing the work nor even be capable of mastering the job immediately, although it is presumed that he has the ability to do the job. A promotion like a reclassification involves a labor-grade change.[2]

A promotion may be made either to a better paying job or to a supervisory position within the bargaining unit or to another position outside the unit. It need not involve a wage increase.

Necessary moves from one job to another if no direct wage increase is at issue are more often initiated by management than by workers and are in the interest of production, to overcome difficulties in the production line caused by bottlenecks or material shortage, or to utilize personnel most efficiently. When such shifts are for short periods, they are usually called job assignments, though some firms use the term "temporary transfers."

An employer's right to select and transfer employees may not be stated explicitly in the agreement, but may be implicit in clauses which vest in management the right "to direct and contro the working force."

In general, management looks upon promotion as one of its prerogatives and does not favo seniority promotions (either plant or departmental) except when the choice involves me equally qualified to fill the new job. In thei view, efficiency is impaired and individual em ployee incentive stifled if seniority, rather tha ability, governs promotions. Labor stresses sen iority as the primary factor in making promotion on the ground that other factors are difficult t measure objectively. Exclusive discretionary powers of management to promote would, th workers fear, entirely negate the union's promotion policy to give consideration to employee over outsiders.

In actual agreements, seniority is generally qualified by ability requirements and may govern only if all other factors are relatively equal, or less strictly, if the employee has minimum qualifications. In emergencies, employers often retain the right to promote (or transfer) employees temporarily without regard to either ability, merit, or seniority.

Sometimes the employer's right to promote is limited by requirements to consult with the union prior to selecting an employee for promotion, to select from a group of employees who request consideration or who are recommended by the union, or to consider present employees first.

If promotion is reserved to employees with proper "merit," "ability," or "qualifications," the union may contest the management's appraisal. Some agreements give the union the right to appeal management's decision to arbitration; others stipulate that management shall make the appraisal, provided that there shall be no discrimination against union members as such.

Seniority status after transfer is allied directly with transfers—particularly when transfers are made from one department or occupation to another. Most agreements incorporate safeguards to protect an employee's seniority upon transfer, especially if the transfer is made at management's option or without pay increases. Emergency, temporary transfers, or transfers of handicapped or superannuated employees are often permitted without regard to seniority and other restrictions.

Some agreements provide for a "promotion from within" policy, without necessarily specifying

[2] Promotions are distinguishable from job reclassifications. A reclassification grievance involves a claim that a person is doing the work of a higher classification and hence should be reclassified into the higher post. Theoretically, there is no vacancy involved if the claim is substantiated since the person would actually be doing the work.

at seniority is the basis. However, they commonly state that employees will be given preference over outsiders both in promotions and in filling vacancies. Some stipulate consultation with the union before a new employee may fill a vacancy. A few agreements specifically require the union to submit a list of possible candidates for job openings, thereby affording some protection against new workers being brought in to fill higher-paid jobs. Under some agreements, union members are given preference in the filling of vacancies and in promotions. Usually such clauses are in agreements providing for a "preferential shop." A few agreements authorize management to fill vacancies from outside under specified conditions when no qualified employee is available.

Vacancy posting is either by simple notification or a complete job description. It is common to post notice of vacancies for a minimum period before they can be filled. The names of the successful applicants may also be required to be posted. In some cases, employers may be required to notify the union of job openings or submit the names of successful applicants.

Instead of posting and bidding, some agreements provide that an employee who desires promotion shall submit a written statement of his qualifications to the foreman or personnel department. Vacancies for promotion are then filled from the list of applicants.

A number of agreements bind the company to consider carefully all applications, and some provide for some form of union participation in considering applicants for vacancies.

Agreements may also specify the area within which job posting and bidding will apply, i. e., whether plant-wide, departmental, or occupational.

Restrictions on employees' rights to bid or apply for vacancies are sometimes set forth in agreements. For example, an employee may not be permitted to bid for another job for a specified period after receiving promotion, he may relinquish all claim to a job, if he refuses a promotion or refuses to bid on one to which his seniority entitles him, or he may be considered ineligible for a stated period to bid again for a job on which he had failed to qualify. Requirements that an employee must remain on the new job for a certain length of time also tend to restrict the frequency of promotions for the individual worker. On the other hand, some agreements permit an employee to decline a promotion without prejudicing his future rights.

Preference to Present Employees Over New Employees

> In the event the company requires additional skilled or semiskilled help, a notice to that effect will be posted on the company bulletin board and employees of the company may bid for such job. If a bidding employee has the ability and if his transfer to the new job will not disturb production, such bidding employee will be given preference over new men and selection from among several bidders shall be on the basis of seniority. Any employee wishing to bid for a new job must make application in writing through his foreman within 24 hours after posting the notice.

In addition to seniority, it is usual to consider, in varying degrees, skill, ability, and merit in the selection of employees for promotion. If seniority is the only consideration, the oldest employee in point of service is customarily given first opportunity to qualify for the vacancy. Otherwise, seniority may be equal to or be secondary to one or more of the qualifying factors, such as, ability, skill, experience, knowledge, and training.

Management may retain discretion in determining whether an employee possesses sufficient or equal qualifications in skill and ability as other applicants. In some cases, the union is empowered to contest this determination of "skill and ability" through the grievance procedure and, in some instances, by resorting to arbitration. Occasionally, the union and management jointly determine an employee's competence for promotion.

An employer may reserve the right to disregard seniority in exceptional cases or when making temporary promotions or transfers. He may retain the power to fill certain specified jobs or a certain percentage of future vacancies from outside the present working force. In some cases, however, the employer must justify these exceptions to the union.

Promotional rights based on seniority are generally restricted to the department or division where the vacancy exists, although many agreements fail to specify the particular unit (plant, department, or division). In the absence of such provisions, the area for applying seniority is probably the same as that for lay-offs. Seniority may be applied on a narrower basis for promotion to skilled jobs than for unskilled jobs.

In some cases in which departmental seniority

exists, employees accepting jobs in other departments are required to start anew in accumulating their seniority. Many agreements, however, facilitate transfer and promotion between departments, if no qualified candidate for promotion is found within the unit in which the vacancy exists.

Few union agreements include specific reference to promotion of employees to and within the skilled trades. However, under agreements that provide for occupational or departmental seniority, persons in skilled trades or maintenance workers are treated separately in applying seniority and promotion rules. During the Second World War, unions and management in many plants instituted special upgrading programs to meet the need for enlarging the skilled work force quickly without, however, destroying the long-term rights and status of fully qualified journeymen mechanics.

It is not unusual for agreements to establish a line of progression whereby experience on the lower-rated job is a prerequisite for advancement to the next higher classification. If a number of employees are considered as competent for promotion, seniority determines the choice. In some instances, all new employees are hired for unskilled work and are promoted by steps. The line of progression is either arrived at jointly by the union and management or established by management with union approval.

Promotion by Seniority Provided Senior Employee Has Necessary Experience and Ability. No Discrimination.

In all promotions or transfers to more desirable jobs by this contract the principle of seniority shall be observed provided the company is convinced that the senior employee has the necessary experience and ability to perform the job satisfactorily. It is agreed that the company and the union will not discriminate against any person or persons because of race, color, creed, national origin or sex.

An employer may frequently make certain exceptions in promotions, although a seniority system is in general effect. Particularly in supervisory positions, the employer is usually granted free choice of candidates, either specifically or through the coverage clauses which generally exclude supervisors from the terms of the agreement. However, some agreements require management to consider seniority in filling vacancies in the supervisory force, or stipulate preference for present employees over outsiders.

An agreement may restrict the employer's right to promote employees to jobs outside the bargaining unit (particularly if union officials or representatives are involved); union consent may be required; or no such promotion may be made until some time after the union official has completed his term of office. A few agreements prevent an employee from being selected as a foreman without his consent; his refusal to accept a supervisory job may not be cause for discharge or transfer.

To an increasing extent, agreements cover the seniority status of employees who are transferred back into the bargaining unit from supervisory or other noncovered positions. Generally, a worker on a supervisory job retains and/or accumulates seniority to be applied upon re-transfer to his old production job in the event of a lay-off or demotion. In some cases, limits are placed on the length of time such employees may retain or accumulate seniority on their former nonsupervisory jobs.

Under many agreements, a trial period is provided to determine whether a senior employee is qualified for the job to which he has been promoted. The period may be fixed for a "reasonable" time, and may be extended, either at management's option or by joint union-management approval. If the promoted employee is not satisfactory, he is generally allowed to return to his former job without loss of seniority or other rights and the next senior person in line is given a trial. The employee may have the right to decide, either during or at the end of the trial period, whether he wishes to remain in the job or reclaim his old one. If the promoted employee qualifies, he usually forfeits all claim to his old job except in those instances in which he is permitted to reclaim his old job in the event of a lay-off. Some agreements limit the number of times an employee may try to qualify for a specific job or other jobs, if he fails to qualify on his first trial.

Maximum of Two Trials on One Job.

An employee who is promoted shall be given a reasonable time, to be agreed upon by the company and the union, in which to prove his ability to fill the new job satisfactorily. If, at the end of such trial period, the employee shall prove to be incapable of fulfilling the duties of the new position, he shall be returned to his former position without loss of seniority. Upon the next occurrence of a vacancy in the occupation for which an employee has failed to qualify through trial, he shall be given another opportunity, if still entitled thereto by seniority, but upon failing twice to qualify for the same job shall not be entitled to a third opportunity.

Employees who are promoted may receive the igher rate of pay immediately or after the trial eriod. In agreements providing automatic wage rogression, the employee may be specifically pro- cted against a cut in pay if his rate at the time of romotion exceeds the minimum for the new job.

The word "transfer" is defined differently by arious unions and employers. In some agree- ents, the line between a temporary and a per- anent transfer is difficult to draw; but, in others, ransfers lasting beyond a specified time are con- dered permanent. If a distinction is made, pro- edures are usually different for handling tem- orary and permanent transfers.

Within-plant transfers may be management- or mployee-instigated. For reasons of plant effi- iency and optimum utilization of personnel, em- loyers generally hold that transfers are an exclu- ive management prerogative, though some weight ay be given to length of service. Some agree- ents give preference to employee requests for ransfers on the basis of seniority or a combination f factors, including seniority.

Certain agreements explicitly affirm managerial prerogative to transfer or to assign employees to ork within the plant. Others limit the exercise f such rights. They may require that transfer irst be discussed with the union, or, more strongly, hat transfers be approved by the union; that ransfers be allowed only with an employee's con- ent; or that transfers be allowed at manage- ent's discretion only under certain specified cir- umstances. Other transfer restriction clauses imit the number of times an employee may be ransferred within a given period or provide that he union may initiate a grievance on transfers. Seniority may be a factor in management- as well s employee-initiated transfers. Still other agree- ents provide that the transfer must be without rejudice to an employee, and must not involve oss of seniority or of lowered earnings.

Permanent Inter-Department Transfers on Agreement Between Company, Employee, and Union.

Any employee may be permanently transferred from one department to another by mutual agreement between the company, the employee, and the union. It is further understood that all permanent transfers shall be made in writing and that any employees so transferred shall maintain their seniority in the department they were transferred from for a period of 4 months. At the end of this time if they have turned out satisfactorily, all of their seniority shall prevail in the department they were transferred to.

In the event that an employee requests a permanent transfer, and does not turn out satisfactorily, they shall be returned to the department from which they were transferred without the loss of any seniority.

Employer-initiated, short-term transfers to break a production bottleneck or for other reasons are frequently allowed without loss of seniority status. A time limit may be set, beyond which the transfer is considered to be permanent and the factor of seniority may enter, both as to the choice of the employee to be transferred and his seniority status in both the old and new departments.

Seniority rules or other transfer provisions are often waived to permit the transfer of handicapped or superannuated employees who are unable to remain in their old jobs. The same waiver is allowed for workers whose health or physical condition make it advisable to relieve them of hazardous jobs or to remove them from occupations which involve mental or physical strain.

Employment Outlook in Electric Utilities [1]

ELECTRIC UTILITY SYSTEMS are one of the most important sources of employment. An estimated third of a million workers were engaged in electric power operations in June 1948. The importance of electric utilities reflects the great dependence of American factories, stores, and homes on electric service. Utility employees operate and maintain the elaborate set of facilities—power plants, substations, overhead wires, underground cables, and meters—required to bring electric power to its consumers.

Most electric utility workers are employed by privately owned systems, which, in June 1948, employed 279,000 workers. These include some workers on nonelectrical operations in companies that provide other services, such as gas or local

[1] Prepared by Richard H. Lewis of the Bureau's Division of Employment and Occupational Outlook.

This article summarizes portions of a forthcoming bulletin on the Employment Outlook in Electric Light and Power Occupations. The bulletin presents a more detailed analysis of the characteristics of utility operations and the outlook for employment, as well as a discussion of opportunities in individual occupations.

transit. About 36,000 worked for municipalities or State power districts, most of them in the municipal systems. Federal operations accounted for almost 6,000 electric employees and rural cooperatives for about 11,000.

Prospective demands upon the utilities for electricity and the additional capacity they are planning to install, will increase their employment by as much as 60,000 during the next 10 years. Most of this increase will take place in the privately owned systems.

Electric Utility Jobs

Workers in utility systems fall into several important groups, each of which has a distinctive part in utility operations. The basic jobs in the generation of electricity are those of the power plant workers. These include boiler, turbine, and auxiliary-equipment operators, who watch over and check the equipment which produces the power, and the watch engineers who supervise them. Also in or connected with the generating station are switchboard operators who control the movement of the current on to the power lines which carry it away from the generation station. Only 15 percent of the private electric utility workers are employed in these and the related jobs necessary for the actual generation of electricity.

A somewhat larger number of employees are engaged in the next stage of getting electric power to the users—the transmission lines and the distribution networks. The transmission and distribution department requires about 23 percent of the private utility employees. These include substation operators who control the transformers and switching equipment, linemen who install and repair overhead lines, and cable splicers who connect and maintain underground cables. Load dispatchers, although relatively few in number, are the key workers of the entire production and distribution operations, for they control the flow of electric current throughout the utility system. Other workers in this department are groundmen who assist the line crews, laborers who help construct underground cable systems, and patrolmen who walk along the electric lines in isolated areas to look for conditions that could cause trouble on the lines and equipment.

Since operation of an electric utility system is largely a matter of keeping the equipment running efficiently, a large force of maintenance workers is required. Maintenance and custodial employees, excluding those who work on the lines, cables, and meters, comprise almost 15 percent of private electric utility employment. Among the more important workers in the maintenance shops are electricians, machinists, mechanics, boilermakers, painters, carpenters, and welders.

Another group of workers who help to carry on the actual operation of electric utilities are those in customer servicing jobs. This group accounts for about 10 percent of utility employment and includes metermen who test and repair meters, and meter readers who record the consumption of electric current so that the customers can be billed for the service.

Because of the nature of its services and the way its production is carried on, the electric light and power industry employs a higher proportion of administrative, technical, and commercial workers than do most other industries. In the industry as a whole, almost 40 percent of the workers are in such jobs. Many companies have as many of these office employees as of the production and maintenance workers combined. For this reason, power companies are one of the most important sources of jobs for accounting, clerical, and other office employees in many localities. The relative importance of office employees in the industry is accounted for partly by work involved in billing and collecting from the multitude of individual customers; and also by the fact that large numbers of workers are not needed in the actual production of electric power.

Electric utility systems employ technical workers whose duties are not closely connected with day-to-day operations. These workers plan for additions to generating plant and installations of new transmission and distribution equipment, supervise or inspect the actual construction and installation, develop improved operating methods, and test the efficiency of the many types of electrical equipment. Electrical engineers are the key members of the technical staffs and, in most electric utilities, hold a large proportion of the top supervisory and administrative jobs. Some mechanical and civil engineers are needed for special phases of the work and large numbers of draftsmen are also employed.

ospective Levels of Production and Capacity

The use of electricity has become a basic part our economic and household activities. Consequently the long-run trend of consumption is osely related to the levels of business and industrial activity, to changes in consumers' incomes, and to population growth. These are me of the major factors that will determine how uch power industry will require at any given age of technical development and how much ectricity individuals will be able to buy.

Perhaps even more important in determining emand for electric power are the introduction of w uses for electricity and the wider adoption of isting uses. Demands for power might be inreased, for example, through the development new industrial equipment powered by elecicity or of a new process using electric current, nd frequently are increased substantially by the eeds of new industries. Furthermore, the addiional use in homes of electrical appliances can ntribute to increased consumption of electricity.

ABLE 1.—*Number of customers and amount of electrical power purchased, by type of use, 1947*

Type of use	Customers (as of Dec. 31)		Power purchased, 1947	
	Number	Percent of total	Kilowatt-hours (in billions)	Percent of total
ll types of use	38,431,950	100.0	217.6	100.0
esidential and rural	33,144,095	86.2	49.7	22.9
dustrial and commercial—				
Small users (mainly commercial)[1]	4,960,895	12.9	38.4	17.6
Large users (mainly industrial)[1]	191,363	.5	113.5	52.1
reet and highway lighting	28,976	.1	2.4	1.1
reet and interurban railways	138	(2)	4.5	2.1
ilroads	31	(2)	2.6	1.2
iscellaneous[3]	106,452	.3	6.5	3.0

[1] The dividing point between small and large users is on a basis of 50 kilowatts of demand. Demand means maximum use of an individual consumer any moment of time.
[2] Less than 0.05 percent.
[3] Includes mainly governmental agencies such as airfields and army camps.
Source: Edison Electric Institute, Statistical Bulletin No. 15, 1948, New York, N. Y.

The users of electricity can be divided into a umber of groups, each of which requires elecicity for certain special purposes. To underand the nature of the future demands for elecicity and to estimate total demand, the potential onsumption of electric power by these groups ust be considered. The number of customers n each major group of consumers is shown in table 1, together with the total amount of power bought by them in 1947.

For many years, industrial plants have accounted for over half of the power purchased from utilities. Electric power is basic to modern mass-production methods and electricity has become essential in industrial operations.

The principal industrial use of electricity is to run electric motors, although lighting is still an important factor in the consumption of energy. The steel, aluminum, and chemical industries use large quantities of electricity for metallurgical and chemical processes.

New industrial uses of electric power, recently introduced or being developed, which promise increasing utilization of electricity, are welding equipment, various types of electric furnaces, infrared heating, induction heating, and annealing. Other growing uses include X-ray equipment, inspecting and testing equipment, and devices which by electrostatic precipitation remove impurities from the air. Air-conditioning equipment is being increasingly installed in factories, especially where controlled temperature and humidity are important to the process.

An important source of increased power requirements could be the use of electrically driven equipment in new industries or processes which may develop. Outstanding examples are the possible future large-scale establishment of synthetic-gasoline plants, and the potentially extensive use of electrically operated ore-beneficiating equipment to eliminate impurities from low-grade ores. Both of these processes, if used to any considerable extent, would require very large quantities of electric current.

Over the long run, a gradual but sustained increase in activity appears likely in most industrial fields using electric power in large quantities. Taking this into account as well as the new uses for electricity in industrial processes, a sustained long-run increase may be expected in industrial consumption of electricity. A good share of the increase is likely to come through new uses; also, the emerging of new industries and new types of production holds great hope for expanded electrical consumption. In those industries which use electricity mainly for lighting and to run electric motors, increases will be largely dependent upon activity.

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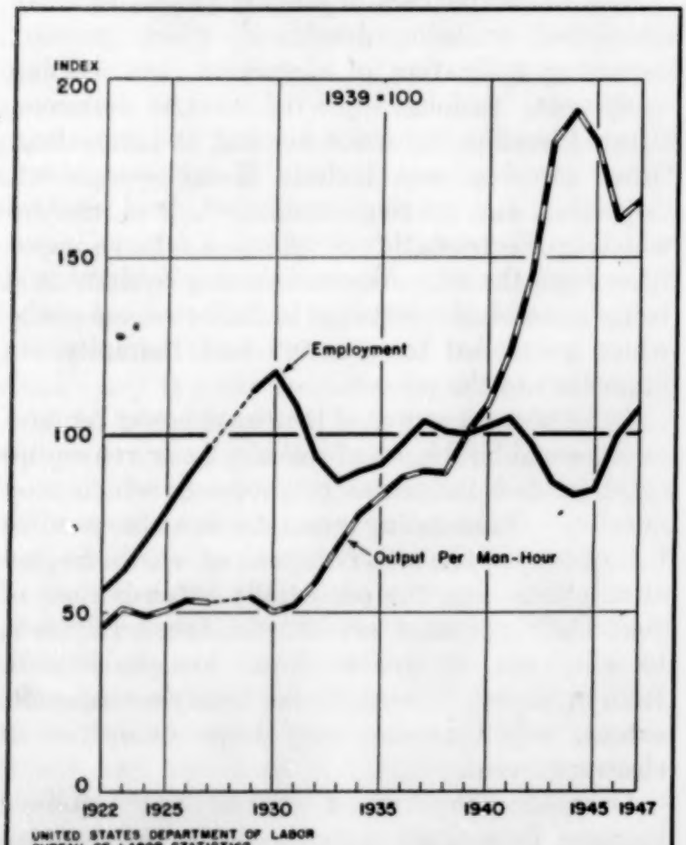
The commercial market for electricity includes retail stores of all kinds; service establishments such as laundries, dry cleaning shops, and beauty parlors; amusement enterprises such as theaters or night clubs; and office and other public buildings. In 1947, small commercial users (including some small industrial plants) accounted for about one-sixth of all sales of electricity to final consumers. Sales of electric energy to these consumers have been increasing continually since 1934.

Employment[1] and Output per Man-Hour Privately Owned Electric Utilities



[1] Data prior to 1929 based on Census of Electric Light and Power Stations. 1928 not available.

The outlook for increasing consumption of electric energy in the commercial field is very promising. Many of the new developments in lighting have not yet been applied in a large proportion of the commercial establishments. Fluorescent lighting, with its greater efficiency in use of current, tends to hold down the consumption of electricity for lighting, but it is believed that this trend will be more than offset by acceptance of higher standards of lighting. In the coming years, air conditioning may becom almost universal in stores and offices, except areas where temperatures and humidity con tions make it unnecessary.

Home and farm consumption has an importa effect upon electric utility employment. Becau of the many individual household and far customers to be served, an elaborate distributi system and commercial organization is require

Two factors will determine the future deman of residential and rural users for power—th number of new customers that will be added, an increases in the average amounts used by customers. In the future, population growth likely to provide many new electric custome but not as many as in past years. Over 90 perce of all the nonfarm homes in existence are alread served by electricity. Even if most of the re maining homes were wired in future years, only limited number of new customers would be adde Large numbers of new dwelling units (houses an apartments) will be constructed to take care housing needs, and they will provide most of th new residential users of electricity. Rapid pro ress is being made by both rural cooperatives an private utility systems in electrifying the Nation farms and a million or more rural customers ca well be added in the next decade.

Despite the rapid strides made in electrifyi household operations, there are still many poss bilities for increasing the use of electrical appliance partly through the introduction of new types equipment. Wider use of already establishe household aids will also stimulate a greater con sumption of current. Surveys have shown th while almost every home has a radio and an electr iron, large numbers of families still do not ha such common appliances as vacuum cleaners an electric refrigerators.

Expansion in the use of electric water heate and ranges could contribute heavily to a increase in total domestic use of electricity. water heater in an average home requires abo 3,500 kilowatt-hours for a year's operation, mo than twice as much as the present average f total consumption per household. Electric rang use over 1,000 kilowatt-hours in a year. Sales electric ranges have been growing rapidly i recent years. Future sales will depend large on how many households will replace gas rang with electric. The main competition on far

ll come from stoves burning liquefied petroleum s.

A development that could revolutionize the ousehold market for electricity would be wide- read adoption of the electric heat pump for ating homes. Heat pumps draw heat out of the ound, the air, or stored water, such as in a well. summer the cycle is reversed, and the pump orks like an ordinary electric refrigerator. A mplete system of heating and cooling, using e heat pump, would require about 10,000 kilo- tt-hours per year for an average sized house.

The use of electricity on the farms is just getting to full swing. Except on western farms, where rge quantities of power are used for irrigation mping, electricity was at first mainly used r lighting and for operating small water pumps. the last 10 years, the advantages of electrically erated equipment for many farm activities ve become apparent. The rural cooperatives, onsored by the Rural Electrification Adminis- ation, have done much to encourage the use of ectricity by farmers. Typical farm uses of ectricity are for milking machines, cooling uipment, and heaters for brooders.

All the indications are for a continued sharp se in the average amounts of current used by omes and farms, especially if incomes remain high, abling the purchase of additional appliances.

Even a conservative appraisal of future de- ands of the various classes of electricity users oints to substantial increases during the next 10 ears in the total electric power that must be enerated. Surveys of future power require- ents on the utility systems, made by different roups, support this conclusion. The Federal ower Commission (in July 1947) estimated that otal electric power requirements on utilities in 952 will be 326 billion kilowatt-hours, compared ith 256 billion kilowatt-hours generated in 1947. This estimate, which was based on an assumed ncrease of 1 percent a year in the Nation's labor orce, would mean an increase in power produced f almost 30 percent over that period. The Mar- et Development Department of the Westinghouse Electric Corp. has, as a result of its study of trends n power consumption, projected an annual total f well over 400 billion kilowatt-hours to be gen- rated by 1957. This study indicated that, to eet the expected demands, total utility capacity hould be raised to 95 million kilowatts by 1957. An increase of this magnitude would mean an almost doubling of capacity within 10 years. Utilities have previously more than doubled their capacity within 10-year periods, but never when the quantities involved were so great (table 2).

TABLE 2.—*Capacity and production of electric utility systems, 1902–47*

Year	Total utility capacity (as of Dec. 31, in millions of kilowatts) [1]	Total utility production (in billions of kilowatt-hours) [1]	Year	Total utility capacity (as of Dec. 31, in millions of kilowatts) [1]	Total utility production (in billions of kilowatt-hours) [1]
1902	1.2	2.5	1925	21.5	61.5
1903	[2]	[2]	1926	23.4	69.4
1904	[2]	[2]	1927	25.1	75.4
1905	[2]	[2]	1928	27.8	82.8
1906	[2]	[2]	1929	29.8	92.2
1907	2.7	5.9	1930	32.4	91.1
1908	[2]	[2]	1931	33.7	87.4
1909	[2]	[2]	1932	34.4	79.4
1910	[2]	[2]	1933	34.6	81.7
1911	[2]	[2]	1934	34.1	87.3
1912	5.2	11.6	1935	34.4	95.3
1913	[2]	[2]	1936	35.1	109.3
1914	[2]	[2]	1937	35.6	118.9
1915	[2]	[2]	1938	37.5	113.8
1916	[2]	[2]	1939	38.9	127.6
1917	9.0	25.4	1940	39.9	141.8
1918	[2]	[2]	1941	42.4	164.8
1919	[2]	[2]	1942	45.1	186.0
1920	12.7	39.4	1943	48.0	217.8
1921	13.5	37.2	1944	49.2	228.2
1922	14.2	43.6	1945	50.1	222.5
1923	15.6	51.2	1946	50.3	223.2
1924	17.7	54.7	1947	52.2	255.7

[1] Includes publicly owned and privately owned utilities. Data for years prior to 1920 are from the U. S. Census of Electric Light and Power Stations. Data for years 1920–47 inclusive were taken from tables published by the Federal Power Commission.
[2] Data not available.

This estimate may turn out to have been too optimistic, but, if present trends prevail, total utility generation of current very likely will reach a level at least between 360 and 400 billion kilowatt-hours 10 years from now.

The utility systems, already pressed by strong demands for power, are well aware of the possible growth in future requirements. Two surveys of projected facilities expansion show that the utilities have already planned for a tremendous volume of additions to capacity.

In March 1948, class I utility systems (those which produce more than 50 million kilowatt-hours a year) reported to the Federal Power Commission that they had scheduled capacity additions amounting to more than 15½ million kilowatts to be installed between the end of 1947 and the end of 1951. Since these systems had 49.4 million kilowatts of capacity in December 1947, this would be an increase of over 31 percent. Assuming that the smaller systems would increase their capacity at the same rate, this would give a

total utility capacity of about 68½ million kilowatts at the end of 1951. About 4½ million kilowatts of the expansion of the class I systems was to be installed in 1948, with most of the remainder scheduled for 1949 and 1950.

Electrical World's annual survey of utility construction, released at the beginning of 1948, indicated that privately owned and publicly owned utility systems are planning to install 23 million kilowatts of additional capacity between December 1947 and December 1952. The larger increases indicated by this survey, as compared with the Federal Power Commission survey, can be accounted for partly by the additional years in the forecast period. The Electrical World survey also includes a large volume of planned Federal projects which are not covered by the Federal Power Commission report.

Since both of these surveys represent the definite plans of utility systems, they should accurately project the minimum increase in capacity that can be expected over the next 10 years. Even allowing for a decrease in the rate of growth after 1952, it appears likely that total capacity will at least fall within the range of 80 to 85 million kilowatts by the end of the coming decade, or 53 to 63 percent more than on January 1, 1948.

Effects of Technological Changes on Labor Requirements

Throughout most of its history, growth in electric utilities has been accompanied by marked increases in output per employee. During its early years, the private electric light and power industry showed steady gains in output per worker. As the chart shows, during the twenties, when utility capacity was greatly expanding, output per man-hour increased but slightly. Productivity rose rapidly in the 1930's until, by 1940, output per man-hour was more than double that in 1930. The private utilities, while absorbing a 20-percent drop in employment, raised their output by over 60 percent during the war. This is reflected by the sharp rise in the Bureau of Labor Statistics index of output per man-hour to a high point 91 percent above the 1939 base. When the utilities began to rebuild their staffs after the end of the war, output per man-hour declined in 1946, but rose again somewhat during 1947. The extent to which past increases in efficiency of production will continue into the coming years will be as important a prospective capacity and production levels i determining the future employment needs utilities.

Several factors are responsible for the industry achievement of continually raising its generati and distribution of power without comparab increases in labor requirements. One has be the introduction of improved and larger equip ment. The industry has always striven to mak its production and distribution operations a automatic as possible. Another is that after system is well established in its operations, addi tional capacity can be handled without propor tionate additions to employment.

Both of these factors will affect the amount the employment increase needed for the prospec tive additions to capacity. Most of the ne generating plants will be larger than the averag ones now in use, and the larger power plant require far fewer employees per unit of outpu The new plants will have the latest features an modern lay-out, including centralized control operations, which tend to reduce employmen needed in the plant to a minimum. New equip ment installed for transmission and distributio of power is generally more trouble-free and flexibl than the older types.

Since much of the increased output will go t present customers rather than new ones, in man areas it will be mainly necessary to revamp an raise the power carrying ability of the transmissio lines and distribution systems, rather than co struct completely new lines. There will not be proportionate increase in meter reading, billing and other activities which are related to the num ber of customers. As a result of these and simil conditions, the utility systems should again b able to expand output with a relatively muc smaller increase in employment.

Development of Atomic Energy. There has be considerable discussion and speculation about th technological and economic effects of the develo ment of atomic energy upon the electric pow industry. Prospective use of atomic energy f power generation will have a far-reaching influen on the design and location of power plants an upon the utilization of fuel by electric utilitie It is likely, however, to have relatively litt effect upon the number and kinds of jobs in t

dustry. As the process of making electricity om atomic energy is now visualized, heat obined from an atomic pile would be used to make eam for driving the turbines. Thus, the prinpal difference in operating method from an dinary steam power plant would be the source the heat for the boilers; that is uranium or other sionable material would be substituted for coal oil. From the production of the steam on rough the rest of the operations, the process ould be the same as now carried on by utility stems.

A power plant using atomic fuel would, however, quire many protective features to guard workers nd equipment against the effects of radiation. hen atomic energy generating plants come into eneral use, they may have considerable influence n location of power plants. Because the quantity atomic fuel needed to run a power plant would e considerably less bulky than the amount of oal required, it should be possible to locate enerating plants where water power is not availble and where it is costly to transport coal. pound of atomic fuel such as uranium will quai the energy output of thousands of pounds coal.

If the present system of control over the development of atomic energy is continued, it is likely that atomic-fueled generating plants would be operated either by the Federal Government or by Government licensed organizations and the power produced would be sold to utility systems for transmission and distribution.

Estimates vary as to how soon generating plants powered by atomic energy will be in regular commercial use. The Atomic Energy Commission in its fourth semiannual report, issued in July 1948, indicated that it does not look forward to large-scale operation of atomic power plants before 20 years. Experimental power plants sponsored by the Atomic Energy Commission will be in operation within a few years, but many years of research and experimentation will be required to make feasible atomic power production in connection with regular utility operations.

Future Trend of Employment

If the utility systems expand their capacity and output as much as expected, a large number of additional workers will be required. However, as pointed out in the discussion of technological trends, the increase in employment will be relatively less than the gain in output. All these factors considered, it seems reasonable to conclude that in 10 years (by 1958) total utility employment will range between 375,000 and 390,000. This would mean an increase of about 45 to 60 thousand—or 14 to 18 percent—over the 330,000 workers employed in June 1948.

The estimated total increase gives but a general picture of the trend. Most of this increase can be expected in the privately owned systems. There will also be variations in the amount of increase among regions and among the different occupational groups.

Operations of Consumers' Cooperatives in 1947 [1]

AN ALL-TIME HIGH in both membership and business was reached by the consumers' cooperative movement in the United States in 1947, despite the number of dissolutions either during the year or after the end of the year's operations. On the other hand, many new associations were formed during 1947. The combined business of the retail distributive cooperatives exceeded a billion dollars and that of the local service associations was over 25¼ millions.

The stores, as a group, showed increases in volume of business exceeding those of any previous year for which the Bureau of Labor Statistics has records. Operating results, however, were less satisfactory than in 1946. Among the reporting store associations, over a fourth (28.5 percent) sustained a loss on the year's operations, as compared with 16.1 percent in 1946; among those which were "in the black," over half had smaller earnings than in 1946. For the petroleum associations, increases in both membership and business were smaller than for the stores, but operating results were better. Less than 3 percent showed losses on the year's business and, of those showing earnings, well over half had earn-

[1] Prepared by Florence E. Parker of the Bureau's Office of Labor Economics.

ings greater than in 1946. For both types of associations, earnings included patronage refunds on purchases made from wholesale associations and, for some retail associations, such refunds were all that kept them on the earnings side of the ledger. Difficult operations were reflected in an unusually large number of dissolutions of associations in 1947 and early 1948.

More than 4,200 retail associations were affiliated with regional wholesales at the end of 1947.[2] and 24 of these wholesales were, in turn, members of National Cooperatives, Inc.

Among the commercial federations, the regional and district wholesales had a distributive and service business of nearly 261 million dollars (compared with 222 millions in 1946). Earnings of the reporting regional wholesales, which exceeded 15 million dollars, were nearly 30 percent above those of 1946; in 1946, however, earnings had been nearly 88 percent above those of 1945. Combined earnings for the group were reduced considerably by the losses of a few associations. As among the retail associations, some of the wholesales—particularly those which deal mainly in groceries—found the going hard in 1947. Two of the three wholesales dealing in groceries sustained a loss on the year's operations and in two other wholesales the grocery departments ended the year "in the red."

Patronage refunds to the affiliated member associations totaled nearly 12¼ million dollars—or nearly half again as much as in 1946.

The year 1947 saw another sizable increase in value of goods produced by the wholesales and productive federations, reaching nearly 128½ million dollars as compared with 95½ millions in the previous year. Over 60 percent of this product came from plants operated by the regional wholesales, and somewhat over a third from those of the productive federations.

Estimates of membership and business of the various types of consumers' cooperatives in 1947 are shown in table 1. It should be emphasized that this table does not indicate the volume of cooperative business done in any particular line, as the table classifies the associations according to their *main* line of business. Thus, an association running a store, and also handling petroleum products, is classified as a "store association" if the main volume of its business is done in the store. Likewise, many associations operate cold-storage departments, which are secondary to other lines of business; and funeral service is provided in some cases by local funeral associations, in some by service federations, and in others by funeral departments of store associations.

TABLE 1.—*Estimated membership and business of consumers' cooperatives in 1947, by type of association*

Type of association	Total number of associations	Number of members	Amount of business
Local associations			
Retail distributive	3,985	2,208,000	$1,050,300,000
Stores and buying clubs	2,500	1,250,000	715,000,000
Petroleum associations	1,400	925,000	320,000,000
Other [1]	85	33,000	15,300,000
Service	793	356,750	25,502,500
Rooms and/or meals	200	25,000	6,100,000
Housing	125	10,000	[2] 3,000,000
Medical and/or hospital care:			
On contract	60	100,000	1,800,000
Own facilities	75	65,000	6,000,000
Burial: [3]			
Complete funeral	36	30,000	355,000
Caskets only	3	1,000	6,000
Burial on contract	4	2,000	41,500
Cold storage [4]	180	106,750	7,000,000
Other [5]	110	17,000	1,200,000
Electric light and power [6]	1,029	[7] 2,030,655	113,704,070
Telephone (mutual and coop.)	33,000	675,000	10,000,000
Credit unions [8]	9,040	3,339,859	455,833,693
Insurance associations	2,000	[9] 11,200,000	[10] 207,000,000
Federations		Member associations	
Wholesales:			
Interregional	1	24	10,581,160
Regional	23	4,220	[11] 255,215,700
District	11	171	[11] 5,663,840
Service	18	1,405	1,782,052
Productive	16	386	53,740,720

[1] Such as consumers' dairies, creameries, bakeries, fuel yards, lumber yards, etc.
[2] Gross income.
[3] Local associations only; excludes associations of federated type (which are included with service federations) and funeral departments of store associations.
[4] Excludes cold-storage departments of other types of associations.
[5] Such as water supply, cleaning and dyeing, recreation, printing and publishing, nursery schools, etc.
[6] Data furnished by Rural Electrification Administration; figures include 36 refrigeration associations
[7] Number of patrons.
[8] Actual figures, not estimates.
[9] Number of policyholders.
[10] Premium income.
[11] Includes wholesale distributive, retail distributive, and service business.

A larger number of consumers' cooperative associations than ever before were in the million-dollar class in 1947. Altogether, 10 associations of urban or rural-urban membership had a volume of business exceeding a million dollars and 10 had 3,000 members or more. Table 2 shows the membership and business of these leading consumers' cooperatives.

[2] It should be pointed out that this figure includes some duplication (where local associations are members of more than one regional wholesale). Also, many of these affiliated retail associations are purely farm-supply associations, not "consumer" associations (i. e., do not handle consumer goods); such associations are not covered in table 1.

Sales of reporting cooperatives averaged 367,015 per association for the stores and 252,880 for the petroleum associations. Net earnings for the stores with earnings averaged 1 percent on total business done; losses for those which could not make ends meet averaged 2 percent of sales. (The corresponding figures for 1946 were 5.5 and 3.4 percent.) For the oil associations, earnings averaged 7.9 percent (10.1 percent in 1946) and losses 2.5 percent (5.0 percent in 1946).

Information on patronage refunds returned by local associations to their members is available for 284 associations (269 distributive associations and 15 service associations). For the whole group these totaled $3,885,757. For the store associations the patronage refunds averaged 3.5 percent on sales, for the petroleum associations 5.5 percent, and for the service associations 4.5 percent.

Although many new associations were formed in 1947, the number of dissolutions, either during the year or after the end of the year's operations, was larger than in any year since the early 1920's. This included a number of associations which, even though volume of business in 1947 had increased over that in 1946, had ended the year with a loss. Numerous factors—increased operating expense ratios, losses on inventory, poor management, losses from uncollectible debts, etc.—were involved. The nonfarm associations, particularly those dealing only in groceries, were hardest hit. The grocery business, with severe competition and low margins, is becoming increasingly difficult to operate successfully unless there is a high operating efficiency and a good volume of business.

Reports received since the beginning of 1948 indicate that dissolutions are continuing. Other associations report that their grocery departments have been closed or that such a step is under consideration.

Both store and petroleum associations continued in 1947 the upward trend in membership and business that has been evidenced since 1941

TABLE 2.—*Leading consumers' cooperatives in 1947*

Type and name of association	Membership	Amount of business, 1947
Urban associations		
Group Health Association, Washington, D. C	[1] 4,400	$443,738
Rochdale Cooperative, Washington, D. C.[2]	3,342	[3] 802,828
Cooperative Trading, Waukegan, Ill	6,000	2,751,468
Greenbelt Consumers Services, Greenbelt, Md	2,511	1,726,667
United Cooperative Society, Fitchburg, Mass	2,640	1,024,855
United Cooperative Society, Maynard, Mass	2,567	1,390,384
Franklin Cooperative Creamery, Minneapolis, Minn	3,300	5,978,170
Cooperative Services, St. Paul, Minn	3,500	790,670
Consumers Cooperative Services, New York, N. Y	8,291	1,990,445
New Cooperative Co., Dillonvale, Ohio	2,110	1,922,482
University of Oregon Cooperative Association, Eugene, Oreg	3,185	392,606
Shipbuilders Cooperative, Newport News, Va	3,190	[4]
University Book Store, Seattle, Wash	[5]	1,715,546
Rural-Urban Associations		
Cloquet Cooperative Society, Cloquet, Minn	3,914	1,702,448
Consumer-Farmer Milk Cooperative, Long Island City, N. Y	6,431	1,863,641

[1] At the end of 1947, this association was serving 13,692 "participants" (i. e., members and their dependents).
[2] Does not include companion association in Arlington, Va., with 728 members and a business of $377,053 for 9 months.
[3] 9 months (fiscal year changed in 1947).
[4] This association did not go into operation until early in 1948.
[5] No data.

TABLE 3.—*Trend of operations of retail store and petroleum cooperatives, 1942–47* [1]

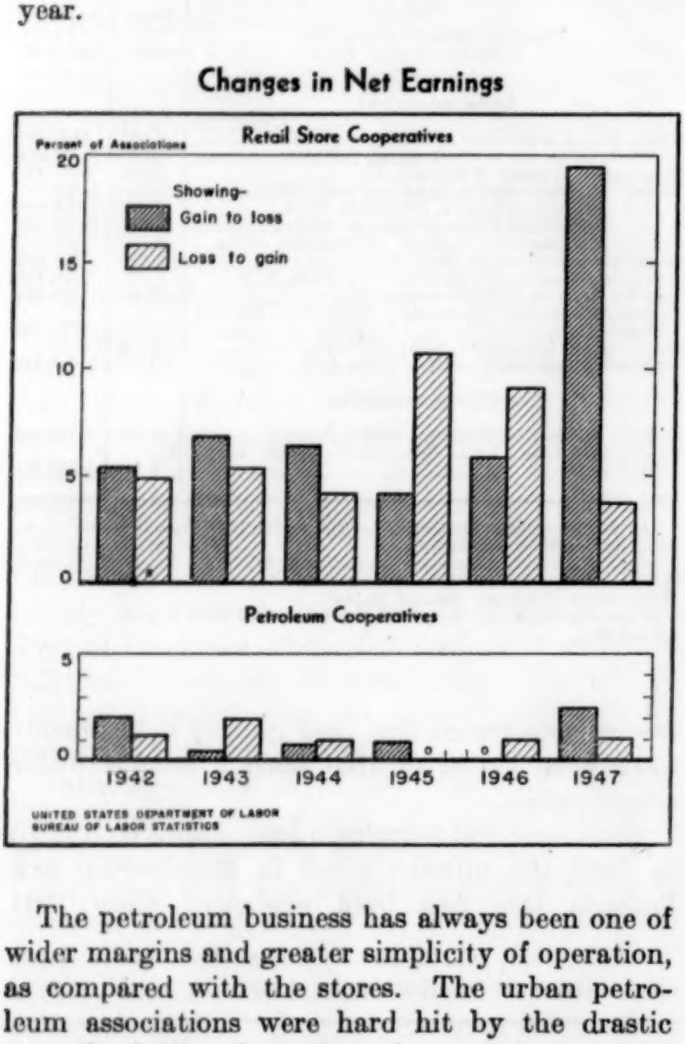
Item	Store associations						Petroleum associations					
	1947	1946	1945	1944	1943	1942	1947	1946	1945	1944	1943	1942
Membership:												
Percent of increase over preceding year	13.4	11.6	15.9	25.6	13.6	8.3	9.6	10.8	11.4	14.4	23.9	9.5
Percent reporting—												
Increase over preceding year	80.9	72.8	82.9	98.8	77.4	75.5	80.2	77.5	78.2	79.9	74.5	73.8
Decrease from preceding year	19.1	27.2	17.1	1.2	22.7	24.5	19.8	22.5	21.8	20.1	25.5	26.2
Amount of business:												
Percent of increase over preceding year	39.9	30.8	11.5	19.6	28.8	30.8	26.3	27.9	10.7	22.6	19.1	13.6
Percent reporting—												
Increase over preceding year	80.8	90.5	72.9	80.3	84.7	90.8	89.7	94.1	86.3	89.4	71.5	78.9
Decrease from preceding year	19.2	9.5	27.1	19.7	15.3	9.2	10.3	5.9	13.7	10.6	28.5	21.1
Net earnings:												
Percent going from—												
Gain to loss	19.4	5.8	4.2	6.4	6.8	5.4	2.4	------	.8	.7	.4	2.0
Loss to gain	3.7	9.1	10.7	4.2	5.3	4.9	1.0	.9	------	.9	1.8	1.2
Percent reporting—												
Loss in both current and preceding years	9.1	3.3	8.4	2.0	1.9	2.2	.5	------	------	.5	------	.4
Increase in gain over preceding year	30.8	62.5	49.4	62.3	51.7	69.5	55.3	88.0	78.9	74.5	60.3	64.7
Decrease in gain from preceding year	37.0	19.2	27.2	25.1	34.3	17.9	40.8	11.1	20.3	23.3	37.5	31.7

[1] Based on identical associations reporting for both current and preceding year.

(table 3), but for the oil cooperatives this was at a slower rate than for the stores.

The increasingly difficult conditions faced by the store associations since the end of the war are reflected in the rising proportions of those with losses and of those which (although still showing earnings) had smaller profits than in the preceding year.

Changes in Net Earnings



The petroleum business has always been one of wider margins and greater simplicity of operation, as compared with the stores. The urban petroleum associations were hard hit by the drastic controls during the war and some went out of business as a result. However, since the petroleum associations in this country are mainly of farmer membership—and thus were able to obtain supplies—the whole group of petroleum associations (as shown in table 3) not only maintained volume of business, but even increased it, during the war. The year 1947 showed an increase in business second only to that of 1945, the year the war ended. For the petroleum associations, as for the stores, 1947 operations on the whole produced smaller earnings and greater losses than in 1946.

Fertilizer Industry: Wage Structure, March 1948 [1]

AVERAGE HOURLY EARNINGS of plant workers in the fertilizer industry in March 1948 amounted to 88 cents an hour. For the majority of individual workers, hourly earnings ranged from 65 cents to $1.09 although 1 in 10 received $1.20 or more. Average wage levels have increased yearly during the past decade and are now more than double the 1939 levels.[2] In March 1948, only 1 worker in 8 earned less than 65 cents and 3 in 10 earned less than 75 cents; practically none had earnings under 40 cents. This may be contrasted with the mid-war year 1943, when nearly a fourth of the workers earned less than 40 cents, about two-thirds less than 65 cents, and about four-fifths below 75 cents (table 1).

Although fertilizer establishments are found in nearly every State, the industry is located principally in the area of greatest fertilizer consumption, the South; the Southeast region and the bordering States of Maryland and Virginia have more than half of the establishments and three-fifths of the workers.

Regionally, there was wide variation in average hourly wage levels in the spring of 1948, ranging from about 75 cents in the Southeast and Southwest to about 60 percent above this figure in the Mountain and Pacific regions. Workers in the Middle Atlantic and Great Lakes regions averaged $1.07 an hour, and in the New England, Middle West, and Border States, around 95 cents. Nearly a fourth of the workers in the two southern regions earned less than 65 cents, and more than

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[1] Prepared by Donald L. Helm of the Bureau's Division of Wage Analysis. More detailed information is provided in a mimeographed report: Wage Structure—Fertilizer.

The present survey was limited to establishments employing 5 or more workers, that were primarily engaged in the manufacture of complete commercial fertilizer and superphosphate, as well as plants manufacturing dry-mix fertilizers from purchased material. In general, the scope corresponds to industries 2871 and 2872 as defined in the 1941 Edition of the Standard Industrial Classification Manual issued by the U. S. Bureau of the Budget. Among those excluded from the survey were establishments manufacturing liquid fertilizers or merchandising fertilizer materials in the natural state or tankage from meat-packing plants used without further processing.

[2] Not only have earnings steadily increased, but because of the great demand for fertilizer during the war and postwar years, employment in this traditionally seasonal industry has shown increasing stability. In 1939, the industry employed less than half as many workers in the slack summer season as in the spring. Employment in 1947, however, was the most stable in recent years; in that year employment in July was only about 29 percent less than in March.

wice as many earned less than 75 cents an hour. n four regions, however, earnings of $1.20 or ore were common; more than half the workers the Pacific and Mountain regions, one-fourth the Middle Atlantic, and one-fifth in the Great akes region averaged at least this amount.

Among the occupational groups studied, laborers veraged 80 cents an hour; in most regions their rnings were about 7 or 8 cents below the average r all plant workers. The highest earnings were ose of maintenance men, who averaged $1.24 for the country as a whole. Regionally, earnings of these workers varied less than those of any other occupational group considered. In most regions, their earnings were about 40 percent above those of laborers. As in many industries, relatively greater wage differentials between skilled and unskilled workers were found in the southern regions than elsewhere in the country; in the Southeast and Southwest, earnings of maintenance men averaged more than 75 percent above those for the labor group (table 2).

TABLE 1.—*Percentage distribution of plant workers in fertilizer establishments, by straight-time average hourly earnings* [1] *and region, March 1948*

Average hourly earnings	United States	New England	Middle Atlantic	Border States	Southeast	Great Lakes	Middle West	Southwest	Mountain	Pacific
Under 40.0 cents	[2]				[2]					
40.0-44.9 cents	0.9	0.1		0.1	1.2		0.3	5.2		
45.0-49.9 cents	.9				.9			7.5		
50.0-54.9 cents	3.3		0.5	.2	6.2			6.3		0.2
55.0-59.9 cents	2.9		.2	1.2	5.3	0.6		1.9		
60.0-64.9 cents	5.3	.7	1.5	3.4	9.7			2.2		
65.0-69.9 cents	9.0		.5	3.9	16.8	.1		10.1		
70.0-74.9 cents	9.3	5.6	4.4	2.4	16.7	.1	2.1	13.1		
75.0-79.9 cents	7.7	.2	4.8	5.2	12.4	1.4	2.9	8.1	2.7	.6
80.0-84.9 cents	7.9	13.1	6.5	1.5	13.3	2.1	1.1	5.4		.2
85.0-89.9 cents	8.2	10.7	2.4	20.0	5.5	2.5	11.7	18.7	11.6	2.3
90.0-94.9 cents	5.7	14.2	6.7	3.2	3.2	9.5	36.2	8.9	5.5	5.7
95.0-99.9 cents	8.2	20.7	6.6	25.6	.8	11.6	20.0	6.6	5.5	2.3
100.0-104.9 cents	6.9	5.2	2.8	14.4	1.4	19.0	4.3	1.5	3.1	11.1
105.0-109.9 cents	5.5	7.6	15.6	6.7	.9	12.8	4.0	.8	7.5	12.5
110.0-114.9 cents	4.1	6.4	13.1	2.1	1.3	10.1	1.3	1.3	.7	9.3
115.0-119.9 cents	3.4	5.2	8.3	1.5	1.1	9.9	9.9	.1	.3	3.9
120.0-124.9 cents	2.9	4.5	10.5	2.2	.5	6.7	.8	.2	19.6	5.2
125.0-129.9 cents	2.5	1.9	3.2	2.1	.9	4.5	2.4	.8	16.8	15.3
130.0-134.9 cents	1.7	.3	3.5	1.7	.4	3.2	2.4	.4	13.7	10.4
135.0-139.9 cents	1.1	2.0	1.8	1.1	.4	2.3	.3	.5	.7	6.1
140.0-144.9 cents	.7	.4	2.5	.6	.3	.9				3.4
145.0-149.9 cents	.4	.6	1.0	[2]	[2]	.9	.3		4.1	1.9
150.0-159.9 cents	.9	.2	1.8	.8	.5	1.0		.2	7.5	3.7
160.0-169.9 cents	.2	.1	.5	[2]	.1	.3				3.0
170.0-179.9 cents	.1	.2	.3	[2]	.1	.1		.1	.7	1.2
180.0-189.9 cents	.1	.1	.3	[2]	[2]	.1		.1		1.3
190.0 cents and over	.2		.7	.1	.1	.3				.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	29,553	892	2,164	4,744	13,478	4,865	375	1,913	292	830
Over-all average [1]	$0.88	$0.97	$1.07	$0.94	$0.74	$1.07	$0.96	$0.75	$1.17	$1.20

[1] Excluding premium pay for overtime and night work.
[2] Less than 0.05 of 1 percent.

Factors in Earnings Variations

In complete fertilizer and in superphosphate plants, proportionately more skilled workers are employed than in establishments that dry-mix only.[3] These differences in occupational composition, together with the tendency for the two former types of establishments to locate in the larger cities, are reflected in part in average wage levels. Plant workers in complete fertilizer and superphosphate plants averaged about 15 cents an hour more than those employed in dry-mix establishments.

Earnings in the three types of fertilizer establishments also varied between companies operating only a single fertilizer plant and those having

[3] Complete fertilizer establishments manufacture acid for use in the superphosphate department, where phosphate rock is ground and mixed with it. After chemical reaction is completed the superphosphate is combined with other purchased fertilizer materials in the dry-mix department. Superphosphate establishments purchase their acids, but perform the other operations indicated above, including those performed in the dry-mix department. Dry-mix establishments purchase their superphosphates and perform only the dry-mix operations.

For a full description of manufacturing methods and equipment and types of fertilizer materials used, see mimeographed report prepared by the Bureau's Division of Employment and Occupational Outlook: Trends in Manhours Expended per Ton for the Manufacture of Selected Types of Fertilizer—1939 to 1946.

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multiplant operations. In both the complete fertilizer and the dry-mix establishments, earnings levels in companies with multiplant operations averaged more than 10 percent above those having single plants. Wage levels in single-plant superphosphate establishments averaged slightly above those in multiplant establishments; however, as in the other two types of establishment a larger proportion of workers in single than in multiplant firms received earnings near the lower end of the wage scale.

Because large numbers of workers are employed at the plant minimum rates,[4] an unusual opportunity is presented to examine differences be-

TABLE 2.—*Straight-time average hourly earnings*[1] *for selected occupational groups in fertilizer establishments, by region, March 1948*

Selected occupational groups	Number of workers	Average hourly rates									
	United States	United States	New England	Middle Atlantic	Border States	Southeast	Great Lakes	Middle West	Southwest	Mountain	Pacific
Foremen (working)	1,180	$1.18	$1.22	$1.39	$1.18	$1.05	$1.31	$1.10	$0.92	$1.22	$1.4
Janitors and watchmen	637	.78	.87	.98	.80	.66	.99	.82	.68	(2)	.8
Laborers (including hand truckers and hand shovelers)	17,078	.80	.89	.99	.86	.66	1.00	.90	.68	1.06	1.2
Maintenance men	1,327	1.24	1.22	1.39	1.23	1.16	1.39	1.30	1.21	1.46	1.4
Maintenance helpers	478	1.00	(3)	1.19	1.02	.87	1.24	(3)	.94	(3)	
Tractor drivers	779	.91	1.23	1.15	1.00	.76	1.14	1.07	.79	(3)	1.0
Truck drivers	484	.96	1.01	1.03	.90	.80	1.04	(3)	.96	(3)	1.1

[1] Excludes premium pay for overtime and night work.

[3] Insufficient data to justify presentation of an average.

tween wage levels by certain plant characteristics, uncomplicated by differences in occupational structure. An analysis of these rates by size of community and type of plant indicates that location of establishment is of great significance in determining interplant differences between wage rates in the industry. Average hourly minimum rates [5] were about 20 cents higher in communities of 100,000 or more than in the smaller communities, regardless of type of plant; within each of the 3 community-size groups, average minimum rates were only about 5 cents higher in complete fertilizer and superphosphate establishments than in dry-mix plants.

Nearly 14,000 of the approximately 30,000 plant workers in the industry were employed at plant minimum rates. This rather unusual concentration may be explained partly by the relatively simple labor requirements of the industry and the seasonal nature of operations. The pay-roll period selected for study was one of peak industry activity. Presumably most of the 8,000 workers added to the industry's labor force between November 1947 and March 1948 were hired at plant minimum rates. In March 1948, average plant minimum rates ranged from 65 cents an hour in the Southeast and Southwest regions to as high as 95 cents and $1.10 in the Great Lakes and Pacific regions, respectively.

In large communities, average wage levels for all plant workers were distinctly higher than in small communities. As table 3 indicates, earnings of laborers in the largest cities averaged more than a fourth above those in the smallest communities.

TABLE 3.—*Average straight-time hourly earnings*[1] *for laborers in fertilizer establishments by type of plant and size of community, March 1948*

Size of community	Complete fertilizer plants		Superphosphate and dry-mix plants		Dry-mix plants	
	Number of workers	Average hourly rates	Number of workers	Average hourly rates	Number of workers	Average hourly rates
Communities of—						
100,000 or more	3,550	$0.91	1,454	$0.90	2,230	$0.8
25,000–100,000	1,952	.82	875	.90	1,329	.7
Under 25,000	747	.71	876	.71	4,065	.6

[1] Excludes premium pay for overtime and night work.

In the important Southeast region, average hourly earnings of laborers ranged from 77 cents

[4] Refers to lowest rate actually paid workers other than watchmen, janitors, apprentices, or handicapped workers.

[5] Averages of minimum plant rates refer to medians; other averages used in this report are weighted means.

complete fertilizer and in superphosphate establishments in the largest cities to 57 cents in dry-mix plants in the smallest cities.

Only a third of the fertilizer plants studied were located in communities of 100,000 population or more, about a fifth in communities of 25,000 and under 100,000, and almost half in those of less than 25,000 population. Because of the larger establishments' tendency to locate in the larger cities, it is estimated that roughly 45 percent of the workers in the industry are in large cities, with the remainder divided fairly equally between the smaller sized community groups.

Higher wage levels prevailed in union [6] than in nonunion establishments. A measure of these differences can be seen best in the earnings of laborers. In union establishments they averaged 88 cents an hour, in nonunion 70 cents. Among the more important regions, union and nonunion earnings, respectively, in the Border States were 94 and 71 cents, in the Southeast 72 and 61 cents, and in the Great Lakes region $1.05 and 93 cents. Unionization was most prevalent among manufacturers of complete fertilizers and in plants located in the largest cities.

Shift Differentials and Hours of Work

Although data were obtained for a season of peak industry activity, multishift operations were not extensive in the industry; only about one-sixth of the establishments studied indicated this practice. Operation of more than 1 shift was reported principally by complete fertilizer or by superphosphate establishments. These accounted for 71 of the 84 establishments reporting a second shift; only half as many plants operated a third shift. Shift differential payments were made by more than half of those operating a second shift and by two-thirds of those operating a third shift. Such payments consisted of a uniform addition in cents to first-shift hourly rates; and generally, this amounted to 5 cents an hour or less for the second shift and over 5 cents an hour for the third shift. Shift-differential payments were less common in the South than elsewhere.

The majority of plants, including a substantial proportion of the largest establishments, reported a 40-hour-schedule workweek for most of their workers. More than 1 plant in 5 reported schedules of over 40 but less than 50 hours, the most typical schedules being 44 and 48 hours. Nearly 1 plant in 7 reported a workweek of 50 or more hours. Most plants with workweeks in excess of 40 hours were single-plant dry-mix establishments.

[6] Somewhat more than a third of the plants, employing roughly three-fifths of the workers, reported agreements with 1 or more labor unions; multiplant establishments accounted for 7 out of 10 of these. Although more than 25 different unions held agreements with the industry, the following organizations were most frequently reported—District 50, United Mine Workers of America; International Union of Mine, Mill and Smelter Workers; International Chemical Workers Union; United Gas, Coke and Chemical Workers of America; and the United Packing House Workers of America.

Injury Rates in Manufacturing, Second Quarter, 1948

WORK INJURIES in manufacturing industries declined during the second quarter of 1948, not only in absolute number but also in the rate per million man-hours worked. The slight seasonal upswing in the injury-frequency rate noted in the first quarter was reversed and the general trend downward was resumed. From a rate of 14.5 disabling work injuries per million employee-hours worked in March 1948, the all-manufacturing injury-frequency rate decreased to 13.9 in April, 13.5 in May, and 13.2 in June.

This decline was partially seasonal. Typically, May and June have shown lower rates than those reported during the first quarter of the same year; however, April usually has been a month of higher rates. The general downward trend is apparent from a comparison of the average rate of 13.5 for the second quarter of 1948 with the rate of 15.7 for the second quarter of 1947 and with 18.1 for the second quarter of 1946. The figure of 14.1 for the first quarter of 1948 was also considerably below the average of 16.0 for the first quarter of 1947. The injury record for the first half of 1948 points to a continuance of the improvement in work safety achieved in manufacturing during 1947.

It is estimated that during the second quarter of 1948 there were approximately 110,600 work injuries disabling employees in manufacturing establishments for 1 or more days. This repre-

sents a decrease of 4,200 from the corresponding figure for the first quarter and is 12,400 below that for the second quarter of 1947. About 400 of the injured workers died as a result of their injuries, and 5,200 others were known to have suffered permanent physical impairments. Later information concerning the final outcome of injuries first reported as causing temporary disability may require increases in these estimates of the more serious cases.

Working time lost during the quarter by these injured persons is estimated as about 2,212,000 man-days. At current wage levels, this represents an estimated value of over 22 million dollars—a loss paid partly by employers in the form of workmen's compensation and partly absorbed by the injured workers in the form of reduced income during the periods of disability. This, however, is only a portion of the total cost which will accrue from the injuries. It includes no allowance for the continuing economic losses arising from the many deaths and permanent impairments, or for the hospital, medical, and other costs incidental to treatment of the injuries.

Of the 117 manufacturing classifications for which comparable data were available, 46 had significantly lower injury-frequency rates in the second quarter than in the first quarter of 1948. For 24 industries the rates were higher, and for 4 they were essentially unchanged. The outstanding reduction was in the rate for the integrated saw-and-planing-mill industry, which dropped from 60.3 in the first quarter to 41.3 in the second quarter. The rate for the battery industry decreased from 26.0 to 15.0, and for planing mills from 51.3 to 42.5. In contrast, the rate for structural clay products rose from 14.0 to 23.2, and that for welded and heavy riveted wrought pipes, from 16.5 to 25.3. These and most of the other major changes in injury-frequency rates for individual industries represented a return to normal levels following unusual increases or decreases in the preceding quarter.

Sawmills had the highest injury rate (56.6) in the second quarter of 1948. Other injury rates above 40 were all in the woodworking group of industries: planing mills (42.5), the integrated saw-and-planing mills (41.3)—although these two industries had shown major decreases from the first-quarter rates—and the manufacture of wood containers (40.9).

The lowest rate, 2.5, was reported for the optical and ophthalmic goods industry. The synthetic-rubber industry had a rate of 2.7, synthetic-textile fibers, 2.8, and electric lamps (bulbs), 2.9.

Industrial injury-frequency rates for selected manufacturing industries, second quarter, 1948, with cumulative rates for 1948

Industry [1]	Second quarter, 1948					Frequency rate	
	Number of establishments [2]	Frequency rate [4] for—				January–June, 1948 (cumulative) [4]	1947: Annual (final) [4]
		April	May	June	Second quarter		
Apparel:							
Clothing, men's and boys'	344	5.4	6.3	7.6	6.4	7.3	7.0
Clothing, women's and children's	281	2.5	3.6	5.8	3.9	4.8	4.9
Apparel and accessories, not elsewhere classified	47	(5)	(5)	(5)	5.7	6.4	7.3
Trimmings & fabricated textile products, not elsewhere classified	68	9.6	16.8	17.3	14.5	14.4	12.0
Chemicals:							
Compressed and liquefied gases	37	13.3	6.1	8.9	9.6	7.9	9.0
Drugs, toiletries, and insecticides	68	8.5	10.5	10.3	9.7	9.7	12.0
Explosives	40	1.4	2.7	7.5	4.0	3.7	5.5
Industrial chemicals	179	9.0	9.4	9.5	9.3	9.5	13.1
Paints, varnishes, and colors	61	9.5	9.6	11.4	10.2	11.2	17.5
Plastic materials, except rubber	26	4.8	6.2	5.1	5.4	5.5	7.3
Soap and glycerin	45	4.5	3.9	5.4	4.6	5.6	9.0
Synthetic rubber	18	3.9	2.0	2.0	2.7	1.7	1.9
Synthetic textile fibers	19	2.1	3.3	2.9	2.8	3.1	5.8
Chemical products, not elsewhere classified	48	8.7	8.8	7.9	8.5	10.6	16.0
Electrical equipment:							
Automotive electrical equipment	23	20.9	17.6	22.4	20.3	18.9	19.2
Batteries	27	14.4	19.3	11.3	15.0	21.1	26.0
Communication and signaling equipment, except radio	20	6.1	3.7	4.8	4.9	4.7	5.7
Electrical appliances	30	18.4	15.1	11.9	15.3	14.4	15.0
Electrical equipment for industrial use	250	8.4	6.7	6.1	7.1	7.7	9.1
Electric lamps (bulbs)	16	4.0	2.0	2.5	2.9	3.2	3.1
Insulated wire and cable	27	13.9	12.6	12.2	12.9	14.3	13.0
Radios and phonographs	92	4.7	4.5	5.7	5.0	5.3	6.2
Electrical equipment, not elsewhere classified	18	6.2	4.6	4.3	5.0	4.6	5.4

See footnotes at end of table.

dustrial injury-frequency rates for selected manufacturing industries, second quarter, 1948, with cumulative rates for 1948 [1]— Continued

Industry	Second quarter, 1948					Frequency rate	
	Number of establishments [3]	Frequency rate [4] for—				January–June, 1948 (cumulative) [4]	1947: Annual (final) [4]
		April	May	June	Second quarter		
ood:							
Baking	21	31.3	17.2	17.8	21.7	16.5	18.1
Canning and preserving	37	11.4	11.3	13.2	12.0	11.7	27.3
Confectionery	37	13.2	14.7	11.1	13.0	14.3	16.1
Dairy products	126	15.6	26.1	26.7	23.0	23.8	22.7
Distilleries	52	9.7	6.8	7.5	8.1	8.2	11.7
Flour, feed, and grain-mill products	28	11.7	10.9	8.7	10.4	9.1	27.1
Slaughtering and meat packing	318	21.4	22.4	19.5	21.1	21.1	29.9
Food products, not elsewhere classified	36	12.0	13.2	12.0	12.4	13.5	20.5
urniture and lumber products:							
Furniture, wood	82	20.6	20.2	21.2	20.6	22.0	28.2
Mattresses and bedsprings	116	16.3	21.7	14.2	17.3	20.5	24.9
Wooden containers	209	38.2	42.5	42.0	40.9	40.8	41.9
Miscellaneous wood products, not elsewhere classified	100	26.0	18.4	18.1	21.0	22.9	34.0
on and steel:							
Bolts, nuts, washers, and rivets	41	15.2	16.2	16.1	15.8	16.7	19.6
Cold finished steel	32	21.1	28.9	17.6	22.3	21.1	22.8
Cutlery and edge tools	28	19.3	12.7	11.3	14.6	15.3	23.6
Fabricated structural steel	192	23.4	20.2	19.8	21.1	22.3	27.3
Forgings, iron and steel	102	18.9	17.1	17.2	17.8	18.5	28.4
Foundries, iron	337	39.7	37.6	36.0	37.8	37.5	44.5
Foundries, steel	105	28.9	29.6	25.4	27.9	28.3	32.2
Hardware	44	15.8	12.3	13.9	14.1	14.3	16.0
Heating equipment, not elsewhere classified	72	22.7	14.5	19.3	18.8	20.1	34.3
Iron and steel	151	6.3	6.7	6.8	6.6	6.6	8.2
Metal coating and engraving	54	28.8	21.4	16.1	22.1	23.4	28.8
Ornamental metal work	42	29.9	24.5	27.7	27.4	25.5	27.8
Plate fabrication and boiler-shop products	115	34.8	32.0	30.7	32.5	34.2	37.2
Plumbers' supplies	39	20.4	23.0	16.4	19.9	18.0	23.3
Screw-machine products	92	14.3	16.1	15.2	15.2	16.5	19.3
Sheet-metal work	56	13.5	20.0	15.8	16.4	20.3	24.2
Stamped and pressed metal products, not elsewhere classified	206	18.0	16.2	19.4	17.9	19.7	23.4
Steam fittings and apparatus	52	14.0	12.9	18.4	15.2	16.2	25.2
Steel barrels, kegs, drums, and packages	21	[5]	[5]	[5]	19.5	19.7	19.4
Steel springs	15	24.4	18.9	22.2	21.9	25.2	21.2
Tin cans and other tinware	23	19.3	13.6	17.7	16.9	14.6	18.6
Tools, except edge tools	58	17.9	17.8	18.9	18.2	18.9	23.7
Wire and wire products	138	19.1	19.1	23.1	20.4	20.6	21.5
Wrought pipes, welded and heavy-riveted	16	[5]	[5]	[5]	25.3	20.8	24.2
Iron and steel products, not elsewhere classified	23	[5]	[5]	[5]	24.7	20.8	24.5
Leather:							
Boots and shoes, not rubber	226	9.3	10.6	7.5	9.1	9.2	9.6
Leather	34	32.7	27.9	25.6	28.8	26.4	29.4
Lumber:							
Millwork, structural	203	27.5	25.8	28.6	27.3	29.5	36.6
Sawmills	49	48.1	61.3	59.9	56.6	56.6	66.6
Sawmills and planing mills combined	33	38.5	39.8	45.8	41.3	52.3	56.7
Planing mills	74	42.6	40.7	44.0	42.5	46.7	42.3
Plywood mills	42	31.7	40.8	34.6	35.6	38.9	38.5
Machinery, except electric:							
Agricultural machinery and tractors	77	23.4	20.9	19.9	21.4	20.7	23.4
Bearings, ball and roller	32	17.3	21.6	19.7	19.4	16.8	14.4
Commercial and household machinery	115	10.1	9.4	9.0	9.5	9.6	11.6
Construction and mining machinery	115	22.7	21.2	21.9	22.0	22.2	28.5
Elevators, escalators, and conveyors	23	15.7	12.2	16.5	14.9	16.8	20.0
Engines and turbines	47	14.9	13.6	11.6	13.3	12.9	13.6
Food-products machinery	56	14.8	20.3	18.0	17.7	19.5	24.6
General industrial machinery and equipment, not elsewhere classified	187	19.6	15.4	18.0	17.7	19.0	22.6
General machine shops (jobbing and repair)	101	22.2	23.3	25.1	23.5	22.3	24.8
Mechanical measuring and controlling instruments	52	12.6	15.3	11.5	13.1	12.2	14.0
Mechanical power transmission equipment, except ball and roller bearings	65	21.9	23.8	17.7	21.0	18.9	20.3
Metalworking machinery	425	14.7	12.9	13.2	13.6	13.5	15.5
Pumps and compressors	73	20.1	18.9	15.9	18.3	18.9	20.1
Special industry machinery, not elsewhere classified	122	24.0	20.4	22.1	22.2	22.3	21.4
Textile machinery	27	12.6	11.4	10.5	11.5	11.6	18.4
Nonferrous metals:							
Aluminum and magnesium products	24	23.5	20.9	18.6	21.1	24.1	20.8
Foundries, nonferrous	220	27.3	16.6	23.6	22.6	22.5	27.0
Nonferrous basic shapes and forms	28	11.9	12.9	11.2	12.0	12.6	15.7
Watches, clocks, jewelry, and silverware	39	6.8	7.2	8.1	7.4	7.2	8.0
Nonferrous metal products, not elsewhere classified	83	16.8	17.4	12.4	15.5	15.2	13.3
Ordnance:							
Ordnance and accessories	15	5.5	5.1	3.1	4.6	4.7	5.6
Paper:							
Paper boxes and containers	297	17.3	16.8	18.9	17.7	19.2	21.5
Paper and pulp	355	19.6	20.5	18.7	19.6	19.3	23.6
Paper products, not elsewhere classified	31	17.3	18.7	20.3	18.7	18.4	20.6
Printing:							
Book and job printing	57	7.5	6.9	10.1	8.2	8.6	9.4
Rubber:							
Rubber boots and shoes	15	6.1	5.5	5.3	5.7	5.8	9.8
Rubber tires and tubes	33	7.9	8.7	7.3	8.0	8.6	10.5
Rubber products, not elsewhere classified	78	15.9	16.9	16.7	16.5	16.4	17.9

See footnotes at end of table.

Industrial injury-frequency rates for selected manufacturing industries, second quarter, 1948, with cumulative rates for 1948
Continued

Industry [2]	Second quarter, 1948					Frequency rate	
	Number of establishments [3]	Frequency rate [4] for—				January–June, 1948 (cumulative) [4]	1947: Annual (final) [5]
		April	May	June	Second quarter		
Stone, clay, and glass:							
Structural clay products	42	21.3	24.4	24.0	23.2	19.0	
Concrete, gypsum, and plaster products	138	(6)	(6)	(6)	34.4	36.5	
Glass	41	12.5	11.6	11.4	11.8	14.4	
Pottery and related products	30	19.9	19.2	23.3	20.8	21.0	
Stone, clay, and glass products, not elsewhere classified	49	18.3	17.7	15.6	17.2	17.0	
Textiles:							
Cotton yarn and textiles	186	8.1	8.2	8.0	8.1	8.6	
Dyeing and finishing textiles	51	12.4	13.0	13.9	13.1	13.2	
Knit goods	78	7.8	8.8	10.2	8.9	8.1	
Rayon and other synthetic and silk textiles	47	9.0	9.7	11.2	10.0	8.8	
Woolen and worsted textiles	142	15.4	12.4	11.8	13.3	13.1	
Miscellaneous textile goods, not elsewhere classified	28	12.5	23.1	22.6	19.3	20.5	
Transportation equipment:							
Aircraft	18	4.5	3.4	3.9	4.0	4.5	
Aircraft parts	26	6.0	5.2	4.7	5.3	6.3	
Motor vehicles	106	9.3	10.7	9.5	9.8	9.8	
Motor-vehicle parts	92	20.0	21.6	18.1	19.8	20.0	
Railroad equipment	51	20.6	19.8	19.7	20.0	19.8	
Shipbuilding and repairs	66	27.0	23.5	23.8	24.9	25.0	
Miscellaneous manufacturing:							
Fabricated plastic products	32	11.2	9.2	13.2	11.3	10.8	
Optical and ophthalmic goods	16	3.5	2.3	1.7	2.5	3.5	
Photographic apparatus and materials	22	5.2	5.7	7.7	6.2	6.3	
Professional and scientific instruments and supplies	61	8.7	7.3	7.3	7.8	7.1	
Miscellaneous manufacturing, not elsewhere classified	139	12.8	9.1	12.8	11.6	11.6	

[1] The average number of disabling industrial injuries for each million employee-hours worked.
[2] A few industries have been omitted because the monthly coverage did not amount to 1,000,000 or more employee-hours worked.
[3] June.
[4] Computed from all reports received for each month; not based on identical plants in successive months.
[5] Annual rates are based on substantially larger coverage than that of the quarterly survey and are, therefore, not strictly comparable with the monthly and quarterly rates.
[6] Not available.

The President's Conference on National Safety, 1948 [1]

THE FEDERAL GOVERNMENT'S first national conference on industrial safety held preliminary sessions in Washington, September 27–29, 1948. President Truman, in requesting the late Secretary of Labor Schwellenbach to organize a long-term cooperative program for accident reduction (through the Department's Bureau of Labor Standards), had cited the 1947 national accident toll—some 2 million disabling work injuries for the seventh consecutive year, 17,000 workers killed, and 91,000 persons permanently disabled. He added:

> Surely there is enough experience in accident prevention in this great industrial Nation of ours to check these needless losses of men and women. * * * Our primary objective, at this time, should be a concentrated and coordinated effort by everyone concerned—management and labor, voluntary safety organizations, and State and Federal labor departments * * * to develop a practical, Nation-wide program for reducing accidents, * * * [with] particular attention to the problems of the smaller plants.

About 400 committee members—industrialists, labor leaders, safety experts, government officials, and educators—laid the groundwork at the September session for a comprehensive, voluntary program of national accident reduction at State and community levels. Following this meeting, the work of the committees is to be expanded on the basis of objectives defined, and recommendations are to be submitted to an enlarged conference in March 1949.

The conference was opened by William L. Connolly, Chairman of the Coordinating Committee and Director of the Bureau of Labor Standards, United States Department of Labor, who pointed out that "although excellent progress has been made by various safety organizations and many industrial firms, no appreciable reduction in the over-all accident rate has been evident for several years. We feel that this Conference program, organized on a permanent basis, will produce results of inestimable value, as it will reach to every part of the country, and all State

[1] Printed copies of the proceedings of this conference will be available from the Bureau of Labor Standards, U. S. Department of Labor.

fficials concerned with safety have pledged their operation."

John R. Steelman, Assistant to the President, elivered the Chief Executive's message on the ation's interest in safety. Mr. Steelman urged ccident prevention in order to conserve manpower t this time of full employment, when certain abor shortages are imminent in strategic industries nd the necessity exists for "high production to eet domestic preparedness and foreign commitments."

Secretary of Labor Tobin, General Chairman f the Conference, in calling for the strengthening f State safety and workmen's compensation laws, oted that most accidents result from a combination of causes not covered by any State law. At least 70 percent of all accidents occur in firms ot currently reached by the organized safety movement, among them the smaller plants.

Former Secretary of Labor Perkins emphasized he need for trained State factory inspectors—consultants "who can advise with plant engineers on everything from guarding elevators to controlling toxic solvents." She stressed the desirability of reestablishing training courses under Government auspices for these State officials, on State request, as was carried out successfully during wartime.

Conferees were also addressed by Carl B. Jansen, president of the Dravo Corp., Pittsburgh, on management's approach to the safety problem. He recognized the necessity for management to obtain labor's unqualified acceptance of safety and accident prevention measures as an essential element in the success of such a program. Charles Sattler, president of the International Association of Governmental Labor Officials, spoke on the States' interest in safety; and Admiral Ross T. McIntire (retired, U. S. Navy) discussed the rehabilitation of the injured worker.

Preliminary Conference Organization

The preliminary conference, a continuing organization, is composed of a coordinating committee and seven general committees, each having members from industry, labor, Federal and State governments, and other organizations. Vincent P. Ahearn, Executive Director, who is also the Executive Secretary of the National Sand and Gravel Association, is assisted by representatives of important safety organizations and other technical consultants.

Representatives of the National Association of Manufacturers and the Chamber of Commerce of the United States of America, as well as of small business, serve on the Coordinating Committee; insurance executives, public and private safety organizations, and related groups, individual safety experts, technical organizations, and governmental or quasi-governmental bodies are represented. The Secretary of Defense and the Administrator of the Federal Works Agency are members.

Labor is represented at top level on the Coordinating Committee by the presidents of the AFL and CIO; a labor representative also serves as vice chairman of each of the seven committees working in preparation for the spring conference; other trade-union members participate in the various committees and their numerous subdivisions.

The chairmen and vice chairmen of the committees are as follows:

Accident Records, Analysis and Use: Ewan Clague, chairman; Commissioner, Bureau of Labor Statistics, U. S. Department of Labor. William Gomberg, vice chairman; director, Engineering Management Department, International Ladies' Garment Workers' Union.

Education: Richard A. Lester, chairman; chairman, Department of Economics and Social Institutions, Princeton University. Harry Becker, vice chairman; director, Social Security Department, UAW (CIO).

Engineering: James E. Trainer, chairman; vice president and production manager, Firestone Tire & Rubber Co. Harvey W. Brown, vice chairman; president, International Association of Machinists.

Labor-Management Cooperation for Safety: Harold C. Zulauf, chairman; vice president, Alexander Smith & Sons Carpet Co. John Sherman, vice chairman; fourth vice president, International Brotherhood of Pulp, Sulphite, and Paper Mill Workers (AFL).

Law and Regulations: Almon E. Roth, chairman; attorney, San Francisco, Calif.

Programs and Services: Fred W. Braun, chairman; vice president and chief engineer, Employers Mutual Liability Insurance Co. Martin P. Durkin, vice chairman; president, United Asso-

ciation of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry.

Research: Dr. W. P. Yant, chairman; director of research, Mine Safety Appliances Co. Sol Barkin, vice chairman; United Textile Workers of America (AFL).

Committee Report Recommendations

Reports and preliminary recommendations submitted to the conference define the scope and activities of the various committees on a study and exploratory basis. Final recommendations are to be made to the enlarged conference in March 1949, following interim meetings of all committees.

The *Committee on Accident Records, Analysis, and Use*, according to the definition of the scope of its work, is to (1) evaluate existing industrial accident statistics and recommend standards of presentation, (2) consider the problems involved in developing uniform and adequate industrial accident reporting and analysis procedures, (3) study and recommend the most practical media for the application and use of accident and injury data, and (4) determine the types of essential cost data and make appraisals in the light of such standards.

The *Committee on Education* will study the needs and methods of adequately integrating and implementing industrial safety education and training. The scope extends to all pertinent areas and levels of education conducted by educational institutions, and by employers, labor, and public and private agencies.

The *Committee on Engineering* has a proposed program that is subdivided as follows: (1) Study of the relationship between safety and efficiency; (2) establishment of techniques involved in the engineering approach to the control of industrial hazards; (3) problems involved in the safe design and safeguarding of machinery, tools, and equipment (with consideration of need for uniformity of State labor codes); (4) safe design and lay-out of plant structures and processes, bringing to the designer a full knowledge of the cause of work accidents; (5) problems and methods of integrating safety within the industrial organization; and (6) technical adequacy of existing safety engineering standards, procedure for producing such standards, and their application and use.

The *Committee on Labor-Management Cooperation for Safety* launched a survey of industrial safety programs in plants where employers and workers have cooperated in accident prevention to determine factors which have contributed to the success of such plans. Three prevalent patterns of cooperation are being studied: A joint safety committee or safety council comprising employer and union representatives, whether or not such arrangement is specifically provided for in the agreement; a unionized plant in which the safety program is organized and conducted by management with worker cooperation and/or participation without the use of a joint committee; a nonunion plant which has worker cooperation and/or participation in the safety program. Recommendations will follow from the study.

The responsibility for plant safety, according to the committee, is the legal and moral obligation of the employer. Protection of the welfare of workers, however, also imposes a moral responsibility on labor to cooperate in accident prevention.

The *Committee on Laws and Regulations* adopted a program, based on its subcommittees' reports, which has the following objectives: (1) A review of existing State industrial safety laws to determine their adequacy and the extent to which they are used; (2) the development of suggested legislation that will enable the States to formulate and enforce safety regulations; (3) development of methods for the organization and adequate financing of State agencies administering industrial safety laws and regulations, including the proper selection, placement, training, supervision, and term of office of personnel; and (4) study of the relationship between Federal, State, and municipal procedures for the formulation and enforcement of industrial safety laws and regulations.

In connection with the review of existing State industrial safety laws, a review was also proposed of the existing rule-making authority in the States in the field of industrial accident and disease prevention. The purpose of such review is to obtain adequate administrative authority in order to ensure necessary flexibility in legislation and regulation to meet changing conditions in industry.

Further study was recommended of the advisability of each State establishing an administrative authority to promulgate and enforce industrial safety regulations, codes, and orders.

It was recommended that the personnel, and insofar as practicable the administration, of State

dustrial safety and health codes should be centralized in a division of industrial safety and health ving the responsibility of administering employent safety standards; that safety inspectors ould be under civil service, with qualifications be established by the agency responsible for e safety program; and that adequate training ograms should be maintained for personnel.

The *Committee on Programs and Services* will rmulate safety programs for industrial companies y kinds and size); trade associations; insurance mpanies; labor, civic, and engineering organizaons; governmental agencies; and small businesses. s a basis for its work, it will appraise desirable ograms existing within these groups.

The *Committee on Research* will appraise existing nowledge of the causes and control of industrial ccidents from the standpoint of adequacy and efulness for accident prevention. Both plant nvironmental factors (such as machines, material, nd unsafe conditions) and human factors (including physical and psychological selection of workers) ill be examined in relation to possible accident roneness. The committee will also determine the reas for which data are lacking and make or ecommend related studies.

British Trades Union Congress: Meeting, September 1948[1]

ACTION ENDORSING the policies of the Government and of its own general council concerning industrial efficiency and production and wage-price controls was taken by the British Trades Union Congress at its annual meeting in Margate, September 6–10, 1948. The Congress also overwhelmingly defeated Communist-supported policies and candidates for office.[2]

Delegates had before them the general council's far-ranging report on the year's activities, including action on instructions of the 1947 convention and numerous resolutions. The most controversial resolutions included compulsory arbitration, wage and price policies, workers' participation in control of nationalized industries, nationalization of iron and steel, and the WFTU.

Sir Stafford Cripps, Chancellor of the Exchequer, presented to the Congress an analysis of the grim national economic position and the need for continued "austerity"; he was able to show that adherence to such a policy held hope for recovery. Sir Stafford pointed out to the Congress that: "Even if corporation profits were reduced by a quarter—a very drastic cut—it would mean an average addition to wages and salaries of no more than 4d. in the pound. What it comes to is this; there is only a certain sized cake to be divided up and if a lot of people want a larger slice they can only take it from others who will in terms of real incomes have a smaller one. There is only one way by which we can with a given volume of employment increase our real standard of living and that is by each of us producing more or in other words putting up our productivity."

Resolutions Before the Congress

A large group of resolutions presented to the Congress indicated discontent with the relationship of wages, prices, and profits and urged more drastic action to reduce profits and prices. The left wing wanted statutory limitation of profits. Numerous delegates referred to the difficulties which rising prices had brought to the working-class household. However, a delegate of the engineering and shipbuilding draftsmen was applauded when he declared that workers were actually better off currently than under any peacetime Government, and that they should exercise restraint and fight for higher production, instead of trying to raise wages or restrict profits.

The composite resolution which won support of the general council and of the delegates, by 5,207,000 to 2,184,000 votes, called upon the Government "vigorously to pursue a policy designed to maintain the purchasing power of wages, * * * to take more effective action to control price movements in order to effect a substantial

[1] Prepared by Jean A. Flexner, Office of Foreign Labor Conditions.

[2] Members affiliated to TUC number 7,791,470—a gain of 251,000 or 3 percent over 1947 (the gain was 13 percent from 1946 to 1947). TUC membership is approximately 87 percent of the total trade-unionists in Great Britain, according to data published by the Ministry of Labor and National Service. This indicates an over-all membership of about 9.2 million in 1948. The civilian labor force in Great Britain in January 1948 totaled 18.8 million. This figure includes some employers and self-employed; on the other hand, the trade-union figures include members overseas and in the armed forces. Thus, about 49 percent of the labor force was organized, about 44 percent being in the TUC.

reduction in consumer prices; to maintain and, if need be, to extend the cost of living subsidies; to review the effects of the purchase tax and other taxes on commodities entering into ordinary domestic use; and to impose stricter limitations on profits." How the latter program was to be implemented was not clarified. The resolutions calling for dissolution of the National Arbitration Tribunal, and cancellation of the order which still requires unsettled disputes to be referred to it, were easily defeated.

The general council reported on its action on a resolution of the 1947 convention calling for joint administrative boards for nationalized industries on which trade-union representatives, elected by and responsible to their memberships, would have equal status with management. During the past year, its economic committee held discussions on the question with representatives of the Union of Post Office Workers (leading proponents of joint responsibility). The committee was willing to treat the post office as a special case, but decided that there was no reason to modify the Congress' policy, adopted in 1945 and acted upon by the Labor Government, regarding the form of workers' participation in the management of nationalized industries. This policy was to keep the unions free of administrative responsibilities so that they would be in an independent bargaining position in dealing with managerial boards on economic issues. At the 1948 meeting, a composite resolution, which practically reaffirmed the 1945 position, was adopted with little opposition. It expressed concern regarding the existing composition of the boards; stressed the need for increasing workers' participation, which can only be obtained from trade-union ranks; and asked that persons appointed to administer the nationalized industries, at all levels, should be chosen on the basis of proved ability, and also (a new point) on the basis of belief in the policy of nationalization. Extensive training schemes to develop qualified administrators within these industries were urged.

The resolution introduced by the Union of Post Office Workers, asking for a joint administrative council to run the Post Office, was passed only after it had been amended, at the instance of the Post Office Engineering Union, to give the council an advisory rather than an administrative role. Thus, the Congress made quite clear its disagreement with the syndicalist views which had been advanced, and its acceptance of the theory that a public official should not be the representative of a union or of any other special group.

As part of "an all out drive for increased industrial efficiency, training and production," a resolution urging legislation to make joint consultative committees compulsory throughout industry was referred to the general council. A similar resolution had been similarly referred in 1947. But in discussions with the Government during 1947–48 the general council had plainly stated its preference for voluntary advisory joint committees (in spite of the wording of the 1947 resolution) and had agreed with the Government to let each industry determine the form of machinery best suited to its problems. After the Ministry of Labor and National Service had been informed as to the arrangements decided upon, the regional industrial relations offices were to assist in establishing the necessary committees. The general council's report stated that regional boards for industry, and local employment committees would play an active part in encouraging the establishment of joint consultative machinery and this decentralization would bring the question home to both employers and workers. Agreements had been reached in 23 industries, the general council reported, and negotiations were proceeding in 15.[3]

Other Activities of the Congress

Concern was expressed by both the general council and the Congress at the delays in establishing development councils under August 1947 legislation, which provides for statutory joint councils for different industries at the national level, to consult on common problems such as efficiency, production, research training, labor recruiting, etc. In general, employer opposition has been the obstacle; but in the boot and shoe industry both union and management rejected the proposals. The only council established thus far is that in the cotton textile industry.

Education and training schemes for trade-union members and officials were prominent in the report of the general council. The need for a coordinated and comprehensive educational scheme was voiced in a resolution at the 1947

[3] See also Ministry of Labor Gazette, August 1948 (pp. 259–260).

nvention, and was the subject of study by the ucation committee of the general council this ar.[4] The committee was unable to recommend y of the formal schemes presented to it, but ered the services of the general council to assist ividual unions in drawing up schemes or cilitating cooperation with educational bodies. In the election of officers, all Communist ndidates save one incumbent, who was unop- sed, were defeated. Arthur Horner of the iners was included in this group. A resolution endorsing the WFTU and urging unity was feated, as were a Communist-sponsored amend- ent to a resolution on freedom and democracy in reece, and a resolution asking for immediate tionalization, by decree, of the iron and steel dustry.

Florence Hancock, in her presidential address, nounced "the organization which, in England as many other countries, tries by every means to ovoke industrial unrest, sabotage constructive forts to reestablish the institutions of democracy, ment unofficial strikes, and undermine union olidarity by discrediting their elected officials."

Arthur Deakin, President of the WFTU, con- emned the tactics pursued within that organiza- ion by the Soviet trade-unions. The Congress rejected the proposal made by Louis Saillant, ecretary of the WFTU, that he should attend the convention as a fraternal delegate.

[4] The committee found that the union movement as a whole spends close to $400,000 a year on various educational activities. The TUC itself conducts training courses for periods of 4 weeks each in London (75 students enrolled during 1947–48); several colleges and universities have organized evening courses, and numerous week-end schools and summer schools for these groups are held each year; scholarships for trade-unionists have been provided at Ruskin College (Oxford) and at the London School of Economics.

State Labor Legislation in 1948 [1]

TEN STATES held regular legislative sessions in 1948.[2] The principal labor legislation enacted was in the field of child labor and workmen's compensation. Other laws included a disability compensation act in New Jersey and changes in the industrial home-work statute in Rhode Island. In the special sessions held in a number of States not holding regular sessions, no labor legislation was enacted.

The most significant achievement in 1948 was the passage in Mississippi of a workmen's compensation law. Existing workmen's compensation laws were amended in six other States.[3]

No legislation regulating activities of trade-unions was passed this year, although such laws were introduced in a number of States. The Louisiana Legislature repealed a 1946 law of the regulatory type, and passed a law providing for mediation of labor disputes. A new act prohibits transportation of strikebreakers into that State.

Child Labor

New child-labor laws in Kentucky and Virginia widen the occupational coverage of the former laws. They establish a basic minimum age of 16 for general employment, which brings up to 20 the total number of States that are in line with the child-labor provisions of the Federal Fair Labor Standards Act. The former minimum age in both States was 14, but in Kentucky this provision did not apply to work outside school hours, and in Virginia children 12 years of age and over were permitted to work outside school hours in fruit and vegetable canneries.

An outstanding advance made by these two acts is the establishment of a maximum 40-hour workweek for boys and girls up to 18 years of age. Both acts also extend to minors under 18 the 8-hour day and 6-day week formerly applicable only to those under 16. Both States strengthened their employment-certificate provisions by requiring certificates for minors up to 18 years of age instead of up to 16, as formerly. Both States also provide for the issuance of age certificates for minors 18 and over, upon request. The Kentucky act raises the minimum age from 16 to 18 years for employment in a considerable number of hazardous occupations.

[1] Prepared by Alfred Acee of the Bureau of Labor Standards, U. S. Department of Labor.

[2] Kentucky, Louisiana, Massachusetts, Mississippi, Missouri, New Jersey, New York, Rhode Island, South Carolina, and Virginia.

[3] For discussion of workmen's compensation legislation in 1948, see Monthly Labor Review, September 1948.

Disability Compensation

In New Jersey a system of disability compensation was established. California and Rhode Island are the only other States having laws of this type.

The New Jersey act provides for payment of compensation to workers who, because of illness or accident not covered by the State workmen's compensation law, are unable to work. Weekly benefits will range from $9 to $22, depending upon the worker's previous wages.

Compensation is not payable for disability resulting from pregnancy or from a willfully and intentionally self-inflicted injury. It is not payable for any period during which the worker receives wages. No benefits may be paid if the worker is entitled to receive unemployment compensation or workmen's compensation payments under the New Jersey law or the law of any other State or the Federal Government. A waiting period of 7 days is required.

Both employers and employees are required to contribute to a disability benefit fund. Benefits under the act are to be payable 25 weeks after the date when contributions to the fund begin (January 1, 1949). Employers are also authorized to establish private plans for the payment of disability benefits to be used instead of the State plan. In such cases, employees are to receive benefits equal at least to those payable under the State plan.

Industrial Home Work

The industrial home-work law of Rhode Island was amended. Its coverage was extended to include subcontractors who furnish materials to be processed in a home; several requirements were added concerning the issuance of licenses to employers and home-workers; and the director of labor, who administers the law, was authorized to gather data regarding wages, hours, and working conditions in the home-work industry.

Industrial Relations

In Louisiana, a 1946 act which regulated and controlled labor union activities was repealed. The effect of the repeal is to restore to full effect an anti-injunction act passed in 1934. The 1946 law had permitted the issuance of injunctions against unauthorized strikes in violation of contracts, against violence or threats of violence, and against combinations of employees in restraint of trade.

At a special session held in September, the legislature established a new board of mediation in the Department of Labor. This board is authorized to do all in its power to promote the voluntary mediation, arbitration, and conciliation of labor disputes. It may offer its service in any labor dispute either upon its own motion or upon the request of one or more of the parties.

The board is further authorized to conduct investigations and make recommendations to the parties. If either the employer or the labor organization fails to follow these recommendations, the board may, with the advice and consent of the labor commissioner and the Governor, publicize its findings and recommendations. The parties are not required to accept the services of the board. The act specifically provides that employees shall have the right to organize and bargain collectively through representatives of their own choosing.

Although the act makes it clear that there is no compulsion, employers and unions are encouraged to make and maintain agreements, to negotiate, and, if a dispute is not settled by conference, to participate in meetings held by the mediation board. If mediation is unsuccessful, the board is to attempt to induce the parties voluntarily to submit their dispute to arbitration. The controversy may be submitted to a board of three persons—one to be appointed by the employer, another by the representatives of the employees, and the third by the two arbitrators first chosen.

At an election held in North Dakota on June 29, 1948, the voters by referendum approved two industrial relations laws previously passed by the legislature. One of these measures prohibits union-security agreements; the other is a general regulatory law, which forbids boycotts, requires a strike vote and cooling-off period before a strike may be called, and also requires registration of unions.

In Maine, a referendum was held in September to determine whether the 1947 anti-closed-shop law previously passed by the legislature should become effective. This act, as well as a proposed measure with more restrictive provisions, was rejected by the voters. In Arizona, an act prohibiting union security agreements was approved by the voters at a referendum held in November.

tate Labor Departments

A Department of Labor and Industry was pro-ided for in New Jersey with authority to admin-ter all types of labor laws, by legislation effective n January 1, 1949. The functions of the existing epartment of Labor and of the Unemployment ompensation Commission, which has been a sep-rate agency, were to be transferred to the new epartment. The Board of Mediation and the tate Commission for the Rehabilitation of hysically Handicapped Persons were to be in he new department also.

1948 Survey of Consumer Finances [1]

Part IV: Consumer Saving and the Allocation of Disposable Income

CONSIDERABLE INFORMATION relating to consumer saving and income was accumulated in the 1948 Survey of Consumer Finances. Although a majority of the Nation's consumer units saved part of their income in 1947, the rate and volume of consumer saving out of income continued to decline. Expenditures of many consumer units exceeded incomes and resulted in a large volume of dissaving. The declining saving rate during 1947 reflected the willingness on the part of very many consumers to purchase a greater quantity of goods and services than ever before. About 3,500 consumer units were interviewed in 66 sampling points throughout the country,[2] giving a representative sample of the entire population of the United States living in private households.

According to the survey estimates, about 31 million spending units saved approximately 25 billion dollars in 1947. Another 13.5 million spending units dissaved, spending about 11 billion dollars more than their incomes. The remaining 4 million spending units neither saved nor dissaved.

There was a substantial increase over 1946 in the proportion of dissavers with incomes of $3,000 and more. More than 25 percent of the consumer units with such incomes dissaved during 1947 as compared with less than 20 percent during 1946. Dissaving for these middle and upper income groups for 1946 and 1947 is shown in the following tabulation:

	Percentage of dissavers	
	1947	*1946*
$3,000–$3,999 income group	30	21
$4,000–$4,999 income group	31	19
$5,000–$7,499 income group	21	15
$7,500 and above income group	16	11

Most consumer units that spent more than their incomes in 1947 were not in adverse financial circumstances, but their budgets were unbalanced because of extraordinary purchases, such as automobiles, furniture, or household appliances. By contrast, those spending units which neither saved nor dissaved were more likely to be in adverse circumstances; that is, those generally whose incomes were less than $1,000 during 1947. These consumers could not qualify as good credit risks and few had any savings to draw upon.

Forms of savings reported most frequently in the survey were life insurance premiums, followed by additions to liquid assets (Government bonds and checking and savings accounts), payments of home mortgages, home improvements, and retirement funds.

Although the higher income groups accounted for the increased proportion of negative savings (dissavings), these groups were also largely responsible for the increased proportions of positive savings. The lowest income groups, those with incomes of less than $2,000, were net dissavers as a group.

On the basis of the survey results, it is estimated that more than two-thirds of all spending units incurred Federal income tax liabilities for the year 1947. The median income after Federal tax for

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[1] This is a summary of parts IV and V of the third annual survey of consumer finances conducted for the Board of Governors of the Federal Reserve System. The first three parts of the 1948 survey were summarized in the Monthly Labor Review for September 1948 (p. 286).

[2] The interview unit, as in previous surveys, was the spending unit. It is defined as all persons living in the same dwelling and belonging to the same family who pooled their income to meet major expenses.

Net saving is defined in these surveys as the difference between consumer income and consumer expenditures (including taxes). Detailed information was obtained from each spending unit on changes in the various asset and liability items that make up the consumer balance sheet. Additions to savings are such items as payment of life-insurance premiums, increases in liquid asset holdings, decrease in debt, payments for home improvements, and payment to retirement funds. Withdrawals from savings were generally decreases in liquid assets and increases in debt.

all spending units was about $2,380. Before taxes, the median was about $2,530.

Spending units in the upper income groups saved a considerably larger proportion of income than did those in the middle or lower income groups. As the income level increased, the proportion of income (after Federal taxes) spent for "other consumer expenditures," largely living expenses, declined (see table). This is consistent with previous budget studies.

Proportion of disposable income allocated to saving, selected durable goods, and other consumer expenditures, by spending units within various income groups, 1947

Type of expenditure or saving	Percent of total income within each income group				
	All income groups	Disposable income [1]			
		Under $2,000	$2,000–$2,999	$3,000–$4,999	$5,000 and over
Net saving	10	−8	3	7	26
Automobiles and other selected durable goods [2]	9	7	9	9	9
Other consumer expenditures [3]	81	101	88	84	65
Total [4]	100	100	100	100	100

[1] Disposable income is defined as money income less estimated Federal personal income tax liability.
[2] Includes automobiles, furniture, radios, and household appliances such as refrigerators, ranges, washing machines, vacuum cleaners, home freezers, and miscellaneous other appliances. Expenditures for automobiles are net of trade-in allowances.
[3] Covers expenditures for all goods and services not included in selected durable goods (see footnote 2). Includes food, housing, clothing, medical care, other living costs, State and local taxes, recreation, transportation, and education, as well as expenditures for durable goods such as floor coverings, jewelry, fur coats, and other miscellaneous durable items.

Part V: Housing Expenditures and Finance

More American families were home owners in the early part of 1948 than at any other time for which records exist. About 18.5 million—nearly half of all nonfarm families—own homes; somewhat less than 17 million families were living in rented dwellings. Except for the depression period of the 1930's, every decennial census since 1900 has shown an increase in the proportion of nonfarm dwellings which are owner-occupied. The decline in home ownership during the depression has apparently been more than offset by the increase during the past few years. However, as the survey points out, the permanence of some of the recent increases in home ownership is uncertain. Many families have been forced to buy houses at inflated prices, and often at prices beyond their means, in order to obtain shelter.

Home ownership, the survey indicates, tends to be related to the amount of income received. Thus, only about two out of every five famil with incomes below $3,000 were home own compared with nearly three out of every fo families with incomes of $7,500 and over. Ho ownership was also more frequent as the age the family head increased. This is a reflection the need for saving and higher income as a pr requisite to such ownership. People in small communities are more likely to own their hom than those in city and metropolitan cente Among the various occupations, home ownersh was most frequent when the head of the fami was in the managerial, self-employed, or retir groups.

Rent control was a factor in keeping the pr portion of income spent for rent by Americ families down to about 12 percent during 194 However, this proportion differed substantial among the various income groups. Families wi less than $2,000 a year paid 21 percent of the income for rent; those with incomes of $5,000 more spent an average of only 9 percent for th purpose. More than a quarter of the famili renting homes had their rent increased during 194 and undoubtedly rent controls prevented increas for many others.

The survey reports that almost half of the non farm families owning homes made expenditure for repairs and additions to their homes durin 1947, and spent more than 5 percent of their gro income for this purpose. Two out of every fiv home owners made payments on mortgage pri cipal or on interest, insurance, and taxes durin 1947. Most of these payments were for "direct reduction" mortgage loans, which are amortize by monthly payments consisting partly of interes on the unpaid balance and partly of repayment principal.

Sale of Defense Homes Corporation Projects [1]

ACTIVE OPERATIONS of Defense Homes Corpora tion ended on July 30, 1948, with a profit of abou $2,100,000. The Government-owned corporation

[1] Data are from Housing and Home Finance Agency, Public Housing Administration, release HHFA—No. 42, July 31, 1948.

hich was created in 1940 to provide housing for fense workers,[2] built and operated nearly 11,000 rmanent housing units, in 13 States and the istrict of Columbia. This housing consisted of dividual and multiple dwelling units, the bulk which were sold to private purchasers. In sposing of the individual vacant houses, veterans re given preference. Veterans had the first portunity to purchase units if the tenants oc- pying them did not avail themselves of the ivilege of buying. Vacant lots in the projects re sold to veterans.

The DHC projects and land originally cost the ederal Government $75,625,455. However, oper- ing profits reduced the total investment to about 1,520,627. Sale of the projects yielded a gross rofit to the Government of $7,681,843, which, ter deducting for the interest paid to the Re- nstruction Finance Corporation on borrowings nd for central office operations resulted in the 2,100,000 profit.

[2] For the establishment and functions of Defense Homes Corporation, see Monthly Labor Review, May 1941 (p. 1061).

Labor-Management Disputes in October 1948

No STRIKES of an industry-wide character began in October. The largest work stoppages in effect were those involving West Coast maritime workers and California oil refinery employees, both of which began early in September and continued through October. In the prolonged strike of about 1,600 Chicago printers, members of the International Typographical Union, further litigation occurred.

West Coast Maritime Strike

West Coast shipping was suspended owing to the Maritime strike which began September 2. The United States Army moved military cargo for the Far East and Pacific outposts by signing contracts with firms in Seattle and San Francisco, that were not members of the Waterfront Employers Association but which had contracts with the International Longshoremen's and Warehousemen's Union.

Some industrial firms were forced to curtail or suspend operations indefinitely because materials were held on strike-bound ships. As the strike entered its second month, the Longshoremen's Union announced a change of policy to allow longshoremen, supervisors, and checkers to assist individual shippers in releasing cargo for local distribution. This was permitted if personnel was obtained through hiring halls under pre-strike conditions. The understanding was that any gains at the termination of the strike would be made retroactive.

As negotiations were deadlocked, Mayor Elmer E. Robinson of San Francisco offered his services as mediator. The union indicated informal acceptance of this offer but the employers continued their refusal to bargain until union officials filed non-Communist affidavits as provided for in the Labor Management Relations Act of 1947. Almost simultaneously, Harry Bridges, longshore leader, named the Waterfront Employers Association and Pacific American Steamship Co. defendants in a $750,000 libel suit for accusing him of being a Communist.

About the middle of October, CIO president Philip Murray sent Allan S. Haywood, CIO director of organization, to San Francisco in an effort to reopen negotiations. However, the employers continued to insist upon compliance with the non-Communist affidavit requirement.

Continuation of Oil Workers Strike in California

The strike of approximately 22,000 oil workers employed in major refineries in California which started early in September continued throughout October. Efforts of Federal and State conciliators to settle the dispute were not successful but negotiations were continued between the International Oil Workers Union (CIO) and the individual companies involved.

On September 23, the Union Oil Co. announced the signing of an agreement with the Independent Union of Petroleum Workers; it provided for an increase of 12½ cents an hour retroactive to July 3 for field, pipe line, automotive, and purchasing de-

partment workers covered. Although company officials indicated that this agreement might form a pattern for settlement of the dispute with the refinery workers, represented by the Oil Workers International Union, no such settlement resulted. As the strike progressed, the union scaled down its wage demand to an increase of 12½ cents an hour, retroactive to July 1; it suggested further that the remainder of the 21-cent increase should be submitted to arbitration by the Governor of California. In addition, the union steadfastly refused a settlement unless it included a satisfactory union-security provision, the right of all strikers to return to work, and the dismissal of damage suits totaling several million dollars brought against the union by the companies.

ITU in Contempt Proceedings

On August 26, Judge Luther M. Swygert, in the Federal District Court for the Northern District of Indiana, ordered the International Typographical Union and its officers to show (by September 7) why they should not be held in contempt of court for alleged violation of his injunction of March 27,[1] and to appear in court September 20. This action grew out of charg by the general counsel of the National Labor Re tions Board that the union had persisted in demands for closed-shop contracts.

In the strike of about 1,600 Chicago newspap printers which has continued since November 2 1947, wage increases, working conditions, a closed-shop conditions are the major issues.

Striking printers with dependents have bee drawing $60 a week from the union "defense fund and single men $40. The NLRB demanded th these payments should be stopped on the groun that they encouraged and supported a strike pursuit of an illegal objective.

On October 14, Judge Swygert found the IT guilty of contempt of court. The union and i principal officers were ordered to cease their unfa labor practices and to report their compliance wit the law by October 26. However, on October 1 the United States Court of Appeals at Chicag granted a stay of execution of Judge Swygert decision, pending appeal.

[1] See Monthly Labor Review, April 1948 (p. 413).

Errata

The following corrections should be made in the article "Expenditures of Moderate-Income Families: 1934–36 and 1945" which appeared in the June 1948 issue of the Monthly Labor Review, page 624, table 2:

	1945 Indianapolis
Average expenditure for current consumption: Total	*$2,411* instead of $2,507
Net surplus or deficit	*−19* instead of −115

Recent Decisions of Interest to Labor[1]

Wages and Hours [2]

Retail and Service Exemption. Two decisions of a circuit court of appeals concern the exemption of employees of retail or service establishments under section 13 (a) (2) of the Fair Labor Standards Act.

(1) A furniture company maintained two warehouses to keep its five retail stores supplied. Over 90 percent of the goods supplied came from within the State. Over a quarter of the goods were shipped from the warehouses to a store outside the State. The warehouse employees were engaged in unloading, storing, and reloading the goods.

The appellate court held [3] that, in the preparation of a substantial part of the goods for delivery to points outside the State, the warehouse employees were engaged in commerce. The appellate court rejected the trial court's ruling that the goods "came to rest" in the warehouse and so were not in the stream of commerce.

It was also held that the retail establishments' exemption did not apply. The trial court had ruled that all five stores and two warehouses of the employer should be considered one retail establishment. But the appellate court held that the term "retail establishment" means a distinct physical place of business, and that each store of the chain must be considered a separate establishment. Even though one of the warehouses was near one of the stores and was connected to it by a passageway and the store's display section was located in the warehouse, this did not make them the same establishment.

(2) A court held [4] that workers in a candy kitchen of a retail food store were not exempt. The candies manufactured in the kitchen were sold to four stores of the employer in the same city, and, for a time, to stores outside the State. Some candy was sent by truck or mail to persons in other States. No sales were made in the kitchen. Annual sales amounted at times to over $100,000.

The employer contended that the employees were exempt, since the kitchen was operated as a component part of a retail store and as an incident in its operation. But the court pointed out that the customary function of retail establishments has been distribution, not production. A retail store which engages in the production of goods steps outside the economic function for which the exemption provided in Section 13 (a) (2) was designed. The large volume of business and the fact that the candy was distributed at stores other than the one where it was made gave further indication that candy making was not typical of the small retail store contemplated in the retail exemption.

Portal Act—"Good Faith" Defense. In the same case,[4] the court also considered the application of sections 9 and 11 of the Portal-to-Portal Act to employees' claim for overtime compensation and liquidated damages. Section 9 provides that an employer shall be relieved of liability under the Fair Labor Standards Act for acts or omissions made, in good faith, in reliance on an administrative regulation, order, ruling, approval, or interpretation of any agency of the United States. A prior suit by the Administrator of the Wage and Hour Division for an injunction to compel the employer to pay overtime to certain employees had been dismissed by the trial court. The Administrator, after filing an appeal from the decision, voluntarily dismissed the appeal. The employer claimed that withdrawal of the appeal was an approval or interpretation within the meaning of section 9, and that he had relied upon this as evidence that the employees were exempt.

However, the court held that withdrawal of the

[1] Prepared in the Office of the Solicitor, U. S. Department of Labor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

[2] This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

[3] *McComb* v. *Wyandotte Furniture Co.* (U. S. C. C. A. (8th). Aug. 25, 1948).

[4] *Wolferman* v. *Gustafson,* (U. S. C. C. A. (8th), Aug. 25, 1948).

appeal was not an approval or interpretation within the meaning of section 9. It pointed out that the appeal might have been withdrawn for reasons of expediency and not because of approval. Section 9 was held to refer to a formalized expression of approval and not to conduct from which an employer might undertake to make certain deductions.

There should, the court held, be further hearings as to the employer's liability for liquidated damages. Section 11 of the Portal Act permits the trial court, in its discretion, to relieve an employer from all or part of such liability, if the employer's act or omission was in good faith and he had reasonable ground to believe it was not a violation of the Fair Labor Standards Act. It was held that the failure of the Administrator to pursue an appeal from a decision in favor of the employer might well give the latter reasonable ground for believing he was not violating the act.

Portal Act—Work During Lunch Period Compensable.—Section 2 of the Portal Act provides that no employer shall be liable for certain claims under the Fair Labor Standards Act. These are claims for minimum wages or overtime compensation for employee activities not compensable by the contract of employment or by custom or practice at the place of employment. A decision [5] of the Ninth Circuit Court of Appeals dealt with the compensability of work performed during an employee's lunch period. The employee, an engineer, was required to attend boilers while eating his lunch, since the boilers needed constant attention. While on the day shift, if the lunch period was included, he worked 8½ hours a day, 6 days a week or a total of 51 hours a week. He was paid, however, for only 8 hours work a day, or for only 48 hours a week. A collective bargaining agreement provided for a day shift of 8½ hours less 30 minutes for lunch "on the employee's time," with pay for a full shift at 8 times the hourly rate. Overtime at the rate of one and one-half times the regular rate was to be paid for all "work performed" in excess of 40 hours.

The court held that the overtime provisions of the contract made the lunch-period work compensable. Such work was held "work performed" within the meaning of the contract. Therefore, the employee worked 11 hours over the work week of 40 hours, while he was paid for only of them. The lunch period work was clearly on this employee's own time, so that the provisio regarding lunch was inapplicable to him.

The court denied a claim for lunch-period wor while an employee was on a "graveyard" shi of 7½ hours a day, with pay for 8 hours' work day. The extra payment for the half hour n ordinarily worked compensated for the half-hou lunch-period work of this employee.

[5] *Hendy Corp.* v. *Mills* (U. S. C. C. A. (9th), Sept. 15, 1948).

Labor Relations

Employer Unfair Labor Practices. Several de cisions of the National Labor Relations Boar and the courts dealt with union charges of em ployer unfair labor practices.

(1) The Board held [6] that a rule prohibitin union activity on the employer's premises wa not an unfair labor practice, when provision fo such a rule was contained in a collective-bargain ing agreement between employer and union The rule, as published by the employer, pro hibited solicitation of membership, pledges, o subscriptions, circulation of petitions, unauthor ized collection of money, and participation in an organizational activity on company time. Th Board refused to consider whether the rule woul have been valid if it had not been provided fo by the collective-bargaining agreement.

(2) The Board ruled [7] that discharge of em ployees because of their participation in mas picketing during a work stoppage was not dis criminatory within the meaning of section 8 (a) (3 of the National Labor Relation Act as amende by the Labor Management Relations Act of 1947 The work stoppage occurred when a union rep resentative refused to accede to the employer' proposal that an independent contractor clea plant machinery. The employees in questio were leaders of a large group of maintenanc employees who undertook to prevent the em ployees of the independent contractor from ente ing the plant. The Board found that threats o force were used and that such activity was un lawful and a proper cause for discharge.

Two recent decisions hold that an employer' statement that his employees would not be bene

[6] *In re W. T. Smith Lumber Co.* (79 NLRB No. 82, Sept. 14, 1948).
[7] *In re Socony Vacuum Oil Co., Inc.* (78 NLRB No. 169, Aug. 20, 1948).

ed by joining a union is permitted by e amended National Labor Relations Act, hen the statement contains neither threat of rce or reprisal nor promise of benefit.

(3) A circuit court of appeals considered [8] the ffect of an employer's statements during a union mpaign to organize his plant. He stated that ages at that plant were higher than in other lants and that if the plant were organized, they ight have to be reduced. The court ruled that ese statements contained no threat of coercion gainst joining the union.

(4) The Board ruled [9] that statements were not oercive which prophesied that, if the union came n, the employer might have to close down the lant for business reasons. The history of local lants had been cited by the employer in support f his allegation. The Board pointed out that here was no threat by the employer to use his conomic power to make his prophecy come true.

Representation Proceedings and Elections. A number of recent NLRB decisions deal with questions of representation under the amended National Labor Relations Act. (1) The Board interpreted [10] section 9 (c) (1) (B), which permits an employer to file a representation petition alleging that one or more individuals or labor organizations have presented a claim for recognition as bargaining representative. It ruled that an employer, unlike a union, was not required to show that a substantial number of employees wished to be represented by the union in question. If an employer endeavored to obtain information on this point, he might be charged with unfair labor practices. Section 9 (c) (2) provides that the same regulations shall apply to all petitions for representation regardless of the identity of the petitioner. The Board held however, that this provision was intended to prevent more favorable treatment to affiliated than to independent unions.

(2) The Board dismissed [11] a representation petition which failed to allege that the petitioning union had demanded recognition by the employer and that the demand had been refused. The Board pointed out that section 9 (c) (1) (A) of the amended National Labor Relations Act describes petitions that the Board will investigate as alleging that "their employer declines to recognize their representative" as bargaining agent.

(3) Two NLRB decisions deal with the effect of a union's affiliation with other unions on representation proceedings. One case concerned section 9 (b) (3) of the amended National Labor Relations Act. This clause prohibits certification of a union as representative of plant guards, if other employees belong to that union or to an affiliated union. The Board ruled [12] that a local union containing plant guards, which had formally severed its connection with an international union containing other employees and which had limited its membership to guards, was entitled to certification under the act. The fact that the union had formerly admitted other employees to membership and been affiliated with other such unions was held immaterial. Unlike a company union, a union of plant guards and other employees was still legal. All the act did was to prevent its certification as bargaining agent. Therefore, the union in this instance could not be compared to a successor to a company union.

(4) In another case [13] the Board certified an international, rather than a local, union as bargaining representative, although the local was also named in the original proceedings. The local union was not yet established and had no officers, and it was conjectural whether it would comply with the requirements for filing financial statements and non-Communist affadavits. The international had complied with these requirements. Therefore it was held that the international was the real party in interest. The Board pointed out that it could on its own motion recall certification in the event of changed circumstances.

(5) The Board ruled [14] that, in determining the right of striking employees to vote in an election of a bargaining agent, it was bound by the decision of the General Counsel that the stoppage was an economic strike, rather than an unfair labor practice strike. It held that economic strikers cannot vote unless they are entitled to reinstatement but that their replacements can. It was held that these strikers were not entitled to reinstatement, since they were permanently replaced.

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[8] *NLRB* v. *Enid Cooperative Creamery* (U. S. C. C. A. (10th), Aug. 20, 1948).
[9] *In re Mylan-Sparta Co., Inc.* (78 NLRB No. 161, Aug. 19, 1948).
[10] *In re Felton Oil Co.* (78 NLRB No. 141, Aug. 17, 1948).
[11] *In re Advance Pattern Co.* (79 NLRB No. 30, Aug. 27 1948).
[12] *In re Chrysler Corp.* (79 NLRB No. 67, Sept. 3, 1948).
[13] *In re Oppenheim Collins & Co., Inc.* (79 NLRB No. 59, Sept. 1, 1948).
[14] *In re Times Square Stores Corp.*, (79 NLRB No. —, Aug. —, 1948).

The strike occurred shortly before termination of a contract between the employer and the striking union. The employer, upon request of a rival union for recognition, filed a representation petition with the Board. The striking union had filed unfair labor practice charges against the employer. The General Counsel affirmed the action of the regional attorney in dismissing the charges, on the ground that the union had not complied with the filing and non-Communist requirements of the amended National Labor Relations Act.

In ruling that it was bound by the decision of the General Counsel, the Board cited section 3(d) of the act, which provides that the General Counsel shall have final authority respecting the issuance of complaints under section 10 (c) (which includes unfair labor practice charges). Even though the Board was given exclusive jurisdiction over representation proceedings, to have held these strikers able to vote as unfair labor practice strikers would have challenged the decision of the General Counsel.

Decertification Proceedings. The Board held [15] that the appropriate bargaining unit in decertification proceedings must necessarily exclude supervisory employees, even though they were included in the previously certified unit. The doctrine that the same principles govern both certification and decertification proceedings was not violated, since section 9(b) of the amended National Labor Relations Act excludes supervisors from any bargaining unit.

Veterans Reemployment

Rights After Second Enlistment. A district court [16] recently dealt with reemployment rights of a veteran after a second enlistment. The case arose before the Selective Service Act of 1948 became effective, so that it was not affected by the reemployment provisions of that act.

The veteran in question had served in the armed forces in 1944–45 and had been reinstated by his employer. In June of 1946 he enlisted again, and later was honorably discharged. When he again applied for reinstatement, the employer refused him a position of like seniority hiring him as a new employee. Financial loss resulted fro this, because he was laid off the following year b reason of his lack of seniority. He sued fo damages and reinstatement.

The employer presented two defenses. Th first was that under the Selective Service Exte sion Act of 1941 the reenlisting veteran had n right to reinstatement. That act provided tha all enlistees "shall be entitled to all the reemploy ment benefits of section 8 of the Selective Trainin and Service Act of 1940, * * * to the sam extent as in the case of persons inducted unde said act." It was agreed that in 1946, when th veteran enlisted, persons in his position were no being inducted. The employer held that th phraseology quoted confined the rights of enlistee to those of inductees; that an inductee could b inducted only once and could claim employmen but once. The court decided that this distorte the meaning of the provision in the 1941 act which it stated, was merely to identify the subjec of sections in the Selective Training and Servic Act specifying the benefits involved. Nothing i the language of the Service Extension Act of 194 shows any intention to discriminate between per sons enlisting for the first and those enlisting fo the second time. Nor does the language indicat that rights of enlistees are to be limited to right that inductees may have at any particular time

The employer further claimed that the veteran was not entitled to reinstatement without loss o seniority, because the union contract limited th accumulation of seniority during military servic to the first period of such enlistments. This contention was held invalid, because, under a de cision by the United States Supreme Court [17] no agreements between employers and unions can "cut down the service adjustment benefits which Congress has secured the veteran under the act."

Decisions of State Courts

Michigan and New Jersey—Constitutionality of Compulsory Arbitration. Two decisions by State courts deal with the constitutionality of compulsory arbitration in labor-management disputes affecting employees of public utilities. In one case,[18] the issue of constitutionality of compulsory

[15] *In re Ellis-Kletcher & Co.* (79 NLRB, No. 22, Aug. 27, 1948).
[16] *White* v. *Boston & Maine Railroad* (U. S. D. C., N. H., July 14, 1948).
[17] *Fishgold* v. *Sullivan Drydock & Repair Co.* (328 U. S. 275).
[18] *Transport Workers Union* v. *Gadola* (Mich. Supr. Ct., Sept. 8, 1948).

bitration, as such, was not decided; but the State mpulsory arbitration statute was held to be valid on the ground that it required a State rcuit judge to act as arbitrator, and that such signation violated the State constitution by nferring administrative and nonjudicial powers d duties upon a judicial officer. The court's inion did clearly indicate, however, without eciding the issue, that it regarded compulsory bitration, as such, in the case of public utilities nd hospitals, constitutionally valid.

In the other case [19] the court was asked to determine the validity of a State law which provided or governmental seizure of public utilities in ertain labor disputes, compulsory arbitration of uch disputes, and prohibition of strikes and lockuts under specified conditions when the compulory-arbitration procedure had been set in motion. The court held the statute constitutional, and in eaching its conclusion made the following rulings: 1) That the statute does not deprive public tility employees of the equal protection of the aws; (2) that it does not impair their liberty to ontract; (3) that it does not impose involuntary ervitude upon them; (4) that it does not deprive ublic utility companies of property without due rocess of law; (5) that it does not unconstitionally delegate legislative power to the board of arbitration by failing to provide adequate standards for he fixing of wages and conditions of employment; (6) that the right to strike which the statute abridges is not an inherent or constitutional right; and (7) that it does not interfere with peaceful picketing, which is protected by the constitutional guarantee of freedom of speech.

New York—Closed Unions and the Right To Work. The New York Court of Appeals ruled [20] that an injunction should be granted to prevent the discharge of employees who did not belong to a closed union. Only sons of members of the union were admitted to membership. A closed-shop contract between the union and the employer provided that the employer could employ nonunion workers when the union was unable to furnish qualified workers, but that such nonmembers were to be dismissed when the union found suitable replacements from among it own members. The nonmembers had offered to join the union, but were refused.

The union contended that the closed-shop agreement was valid and that no action could lie against it by employees who were not members of the union and thus were strangers to the agreement, and that the union could not be considered the statutory bargaining representative of the nonmembers. However, the court upheld the arguments of the nonmembers that the union was their bargaining representative under the State labor relations law, since it had been designated as such by a majority of the employees. Therefore, while the union could reject them as members, it could not procure their discharge.

[19] *State of N. J.* v. *Traffic Telephone Workers* (N. J. Chancery Ct., Sept. 10 1948).

[20] *Clark* v. *Curtis* (N. Y. Ct. of Appeals, May 21, 1948).

Chronology of Recent Labor Events

September 12, 1948

THE INTERNATIONAL ASSOCIATION of Industrial Accident Boards and Commissioners opened its annual convention in New York City. (Source: Bureau of Labor Standards.)

THE ECONOMIC COOPERATION ADMINISTRATOR announced formation of the Anglo-American Council on Productivity to study England's production and to recommend improvements. Membership was to consist of 6 representatives each of labor and management from Great Britain and 4 each from the United States. (Source: ECA release No. 165.)

On September 21, the appointment of the fourth United States labor representative on the council was announced—Thomas J. Harkins of the Brotherhood of Locomotive Engineers (Ind). The other three are Harvey W. Brown, International Association of Machinists (Ind.), Leland S. Buckmaster, United Rubber Workers of America (CIO) (replaced by Victor Reuther, United Auto Workers (CIO)), and Lee W. Minton, Glass Bottle Blowers Association (AFL). (Source: ECA release No. 177 and U. S. Dept. of Labor release S49–407, Oct. 18, 1948.)

September 14

THE NATIONAL LABOR RELATIONS BOARD, in the case of *W. T. Smith Lumber Co.* and *International Woodworkers of America (CIO)*, held that enactment of certain rules was not a violation of the NLRA (although the validity of some was questionable), inasmuch as the union had signed an agreement with the employer including such rules. (Source: Labor Relations Reporter, vol. 22 LRRM, No. 41, p. 1426.)

THE ADMINISTRATOR of the Wage and Hour Division, U. S. Department of Labor, postponed the enforcement (scheduled for September 15) of his revised interpretations of overtime pay requirements, under the Fair Labor Standards Act of 1938. The postponement was authorized pending a review by the Supreme Court of its decision on longshoremen's back-wage suits (see Chron. item for June 7, 1948, in MLR, July 1948). (Source: U. S. Dept. of Labor, Wage and Hour and Public Contracts Divisions release PR–167, Sept. 14, 1948, and Federal Register, Vol. 13, p. 4534.)

On October 11, the Supreme Court of the United States, in the case of *Bay Ridge Operating Co.* v. *Aaron* and *Huron Stevedoring Corp.* v. *Blue*, voted 5 to 3 to uphold its decision of June 7. Accordingly, enforcement of the Admini trator's revised interpretation was to start on October (Source: U. S. Dept. of Labor release, PR–169, Oct. 1948.)

September 16

THE NLRB, in the case of *D. D. Bean and Sons Co.* a *United Furniture Workers of America (CIO)*, held that t employer interfered when he attempted to induce an e ployee by threats of reprisal and promise of benefit withdraw his charge of discrimination and to sign a sta ment that he had been laid off for economic reason (Source: Labor Relations Reporter, vol. 22 LRRM, N 43, p. 1436.)

THE ASSOCIATION of Communications Equipment Worke (CIO) and the Western Electric Co. agreed upon a wa increase averaging 11 cents an hour for some 25,000 te phone installers in 43 States, thus avoiding a strike sche uled for the next day. (Source: CIO News, Sept. 2 1948, p. 9; for discussion, see MLR, Oct. 1948, p. 394.)

September 17

THE CHAIRMEN of the Wisconsin Employment Relation Board and the NLRB signed an agreement, providing f the holding of one election in the same bargaining unit place of the two separate elections previously require (Source: Federal Register, Vol. 13, p. 6009.)

September 18

THE 18-DAY STRIKE of Local 807 of the Internation Brotherhood of Teamsters (AFL) against New York Cit trucking companies ended when individual compani began to sign for hourly wage increases of 15 to 17½ cent (Source: BLS records; for discussion, see MLR, Oct. 194 p. 395.)

September 22

THE NLRB, in the case of *Allen-Morrison Sign Co., In* and *United Steelworkers of America (CIO)*, decided tha the employer's refusal to bargain, by breaking off negoti tions with the certified union on the ground that an anti union petition was being investigated by the NLRB, wa not justified. (Source: Labor Relations Reporter, vo 22 LRRM, No. 45, p. 1451.)

September 23

THE UNITED STATES Circuit Court of Appeals at Chicago in the case of *Inland Steel Co.* v. *United Steelworkers America (CIO)*, held unanimously that the LMRA of 194 compels employers to bargain with unions on retirement and insurance plans. The same court upheld, 2 to 1, th non-Communist affidavit requirement of that law. (Source Labor Relations Reporter, Analysis, vol. 22, No. 43, p. 85 for discussion, see MLR, Oct. 1948, p. III.)

THE CIVIL SERVICE COMMISSION issued regulations where by the promotion and related rights of employees wh

ve or have left positions (other than temporary) in the ecutive branch of the Federal and District of Columbia overnments after June 24, 1948, to join the armed forces, e protected.

On September 9, the Comptroller General of the United ates had rendered an opinion that the Selective Service t of 1948 (see Chron. item for June 24, 1948, MLR, g. 1948), unlike the 1940 act, gave no ground for ob- tion to issuance of such regulations. (Source: U. S. w Week, 17 LW, p. 2126.)

HE 15-DAY STRIKE in 8 plants of the Briggs Manufacturing o., which affected some 50,000 workers, ended with the ning of a 2-year contract granting maintenance of embership.

On September 8, 170 plant guards, members of the nited Plant Guard Workers of America (Ind.), had gone strike, demanding, among other things, increased reparatory time at overtime rates. (Source: BLS cords; for discussion, see MLR, Oct. 1948, p. 395.)

September 27

THE NLRB, in the case of the *Marine and Shipbuilding Workers of America (CIO)* and *Merrill-Stevens Dry Dock nd Repair Co.*, ruled that under the LMRA of 1947, lead men" were supervisory personnel and as such ineligi- le for membership and bargaining rights in a rank-and- le union. (Source: BLS records.)

September 29

THE PRESIDENT'S Conference on Industrial Safety closed, fter laying groundwork for an enlarged conference to be eld in March 1949. (Source: U. S. Dept. of Labor, abor Press Service release, Oct. 4, 1948; for discussion, ee p. 508 of this issue.)

THE CHAIRMAN of the Atomic Energy Commission an- nounced that for security reasons he had banned from acting as bargaining agents, in two atomic energy plants, the United Public Workers of America (CIO) and the United Electrical, Radio and Machine Workers of America (CIO), some of whose officers had failed to sign non-Communist affidavits and some of whom are suspected of Communist affiliation. (Source: Labor Relations Reporter, Vol. 22, No. 45, p. 304.)

On October 1, the president of the CIO protested the "blacklisting" of two CIO unions "without prior consultation either with the interested parties or responsible officials of the CIO." (Source: CIO release, Oct. 1, 1948.)

September 30

THE MASTERS, Mates and Pilots of America (AFL) and the Atlantic and Gulf Ship Operators Association agreed to a 6-percent across-the-board wage increase (for other settlements see Chron. items for Aug. 18, 1948, MLR, Oct. 1948; Aug. 13, 1948, MLR, Sept. 1948) and a compromise hiring clause. (Source: AFL Weekly News Service, Oct. 5, 1948.)

October 4

SIX CABINET OFFICIALS and three Federal agency heads pledged full support to the movement for employment of handicapped persons, in connection with National Employ the Physically Handicapped Week, October 3–9, 1948. (Source: U. S. Dept of Labor release, Oct. 4, 1948.)

On September 14, the President had issued a proclamation calling upon the people of the United States to observe the week—"NEPHW." (Source: White House release, Sept. 14, 1948.)

October 6

THE UNITED MINE WORKERS of America (Ind.) announced the intention of adopting a plan of medical and hospital care for its 400,000 bituminous-coal miners and their families. The plan as projected is to be financed from the UMWA Welfare and Retirement Fund (see Chron. item for May 18, 1948, MLR, July 1948) at no cost to those covered. (Source: UMW Journal, Oct. 15, 1948, p. 7.)

THE ORDER OF RAILWAY CONDUCTORS of America (Ind.), the Brotherhood of Railroad Trainmen (Ind.), and the operators announced agreement on an hourly wage increase of 10 cents, effective on October 16. (Source: Labor, Oct. 9, 1948.)

October 9

A FEDERAL COURT OF APPEALS, pending an appeal, suspended the $20,000 fine imposed (October 8) on local 1250 of the Department Store Employees Union (Ind.) formerly Retail, Wholesale and Department Store Union of America (CIO)) for failing to obey an injunction (September 14) against picketing Oppenheim Collins and Co. stores. (Source: New York Times, Sept. 9 and Oct. 5 and 11, 1948.)

On August 1, the union had not qualified in the store's collective bargaining election, owing to failure of some of the union's officers to sign the non-Communist affidavit required by the LMRA of 1947. (Source: New York Times, Sept. 4, and Oct. 2, 1948.)

October 11

THE SUPREME COURT of the United States, in the case of *J. H. Allison and Co.* v. *Amalgamated Meat Cutters (AFL)*, by refusing to review the decision made by the United States Circuit Court in Cincinnati, in effect upheld that court's decision that the LMRA of 1947 requires an employer to bargain with a union before granting individual "merit" increases to employees. (Source: U. S. Law Week, vol. 17 LW, p. 3094.)

Publications of Labor Interest

Special Reviews

Economic Security and Individual Freedom: Can We Have Both? By Albert Lauterbach. Ithaca, N. Y., Cornell University Press, 1948. 178 pp., bibliography. $2.50.

The author answers the question of his title by saying that there is no intrinsic conflict between freedom and security. Stated negatively, security without freedom has never long survived; and the gravest danger to freedom is the economic insecurity of depression, which in turn breeds oppression.

Oppression and depression are the two great fears. The fear of oppression gave rise to the ideals of laissez faire in government and unrestricted competition in economic life. It was believed that the conflicting interests of individuals as controlled by competition would be harmonized with the general interest. The failure of laissez faire was accompanied by the great social dislocations and insecurity of economic depressions. Laissez-faire policy today, the author asserts, is at best utopian. At the other extreme, the totalitarian solution of the problem of economic security has already proved to be devastating to security as well as to liberty. And yet there is no assurance that another nation may not seek a refuge from another wave of depression and unemployment in a totalitarian pseudo solution.

On the basis of these general considerations, the author analyzes the conditions and requirements of freedom joined with order in economic society. He rejects the view that freedom is exclusively associated with "free enterprise" of the traditional type. He accepts a broader interpretation of free enterprise as "an unimpeded development of ideas and activities—especially those aiming at improvements—by every individual." In other words, liberalism in its fundamental meaning can no longer be identified with laissez faire and must be associated with purposeful action by a democratically organized society to whatever extent may prove to be necessary for achieving alike the freedom aims and the welfare hopes of the earlier liberalism. The volume is in large part an effort to define the nature and limits of democratic action which the author believes to be necessary to achieve these aims.—W. B.

The Structure of Postwar Prices. By Frederick C. Mi... New York, National Bureau of Economic Resear... Inc., 1948. 66 pp., charts. (Occasional Paper ... 27.) 75 cents.

In this monograph, Dr. Mills brings into focus ... salient characteristics of the inflationary postwar pr... structure, including an analysis of many aspects of ... wartime and postwar economy. Covering an 8-y... period, 1939 through early 1948, emphasis is laid upon ... substantial excess of increases in aggregate dollar val... of goods produced and services rendered over the increa... in physical volume output. Inflation is defined as ... condition that exists when such aggregate dollar val... advance "more rapidly than the physical volume of ... same goods and services".

During the 8-year period, inflation was accompani... by unequal movements of prices, wages, and profits, whi... in turn affected producing and consuming groups ... equally, altered trading relations among economic grou... and materially modified the domestic structure of co... and prices. Farmers, it is pointed out, have ma... substantial gains, because their aggregate physical rewar... have increased considerably more than their aggrega... physical contributions, and this is true "whether the ba... of comparison be recent or far removed." The rewar... of manufacturing labor more than doubled between 19... and February 1948, while the gains of nonmanufacturi... labor, in real hourly wages, the report shows, exceed... those of manufacturing labor for only 4 groups (of ... covered in this survey): bituminous coal miners, worke... in hotels and in quarrying and non-metallic mining, an... common labor in road building.

Elements of the cost structure in the economy have ha... their relationships modified in many ways as a result ... wide price movements. Although to a considerable degr... price movements merely reflect changes in underlyin... factors of production, distribution, and consumption, ... some extent "price changes are active elements, to whic... physical processes require adjustment."

Dr. Mills states that changes in price relations sinc... 1939 will not necessarily be reversed in the near futur... because some of the changes may have accompanie... enduring alterations in underlying conditions. Neverthe... less, as passing shortages are corrected, and supply an... demand are stabilized under peacetime conditions, th... price structure will be modified accordingly. Thes... modifications may bring agricultural and industrial price... nearer to their relationship in the interwar period. It i... recognized that government support of farm prices an... increased strength of labor organizations, among othe... factors, protect the present cost and price system agains... a major downward readjustment, even though "the pas... record of peacetime declines, as well as of postwar rece... sions, suggests the possibility of a sharp initial drop i... prices when the peak has been passed."

The growth of industrial productivity (rate of gain i... output per manhour), which gave impetus to the grea... industrial advance of the twenties, has been retarded de... spite such technical gains as may have been scored in th... industrial effort of the war years, according to the author...

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

rate of increase in industrial efficiency since 1939 has well below the rate prevailing during the quarter tury before 1939. Because the cumulative movements rices commonly termed inflation or deflation result a diversity of individual judgments and actions, the duct of industrial producers and of industrial labor strategic in shaping the future economic course of the ion. "Maintained high production, with the pro- tivity gains that are potential in the present situation, provide an umbrella under which some of the most ssary of these corrections may be effected."—W. F.

perative Movement

peratives. (*In* Law and Contemporary Problems, Vol. 13, No. 3, Durham, N. C., Summer 1948, pp. 391–546. $1.)

Data on urban consumers' cooperation are presented in articles written, respectively, by a well-known writer cooperatives and by the executive secretary of the perative League of the USA. The other 10 articles in special number relate mainly to farmers' marketing purchasing associations, especially their status as rds antitrust immunities, Federal income tax, and posi- before the courts on a number of subjects. In the ority of cases, the treatment is from the legal point of , with copious citations from court cases. Two of the cles were written by representatives of the National Tax nality Association, the organization which has been cking the tax status of cooperatives.

lopments in the Consumers' Cooperative Movement in 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 13 pp. (Bull. No. 932.) 15 cents, Superintendent of Documents, Washington.

liography on Cooperation in Agriculture. Compiled by Howard B. Turner and Florence C. Bell. Washington, U. S. Department of Agriculture, Library, June 1948. 178 pp.; processed. (Library List No. 41—Revision of Farm Credit Administration Bull. No. 4.) 85 cents.

ndexed by author, country, and key words. A list of perative periodicals is included.

perative Frozen Food Locker Associations. By L. B. Mann and Paul C. Wilkins. Washington, U. S. Department of Agriculture, Farm Credit Administration, Cooperative Research and Service Division, 1948. 36 pp., map, charts, illus.; processed. (Miscellaneous Report No. 116.)

Gives statistics on size, income, expenses, etc., for a orting sample of 341 cooperatives. According to the ort, at the end of 1947 there were in operation 900 co- rative locker plants, of which 275 had been formed in 3 years 1945–47.

istics of Farmers' Marketing and Purchasing Cooperatives, 1945–46. By Grace Wanstall. Washington, U. S. Department of Agriculture, Farm Credit Administration, Cooperative Research and Service Division, 1948. 54 pp., maps, charts; processed. (Miscellaneous Report No. 119.) Free.

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Cooperatives in Postwar Europe. By Florence E. Parker. Washington, U. S. Bureau of Labor Statistics, 1948. 22 pp. (Bull. No. 942; reprinted from issues of Monthly Labor Review, January–June 1948.) 15 cents, Superintendent of Documents, Washington.

Cooperative Housing in Europe—A Survey of Activities in Some Countries Since the War. (*In* Review of International Cooperation, London, July 1948, pp. 133–138.)

Presents statistics on this little-known subject for Sweden, Denmark, Finland, Czechoslovakia, and Switzerland.

Statistique des Sociétés Coopératives [en la République Populaire de Bulgarie], 1941–42. Sofia, Direction Générale de la Statistique, 1947. 165 pp. In Bulgarian and French.

Employment and Unemployment

Labor Force, Employment, and Unemployment, 1929–39: Estimating Methods. Washington, U. S. Bureau of Labor Statistics, 1948. 4 pp. (Serial No. R. 1929; reprinted from Monthly Labor Review, July 1948.) Free.

Nonagricultural Employment, by State, 1943–47. Washington, U. S. Bureau of Labor Statistics, 1948. Variously paged; processed. Free.

Some Implications of a Program for Full Employment and Economic Stability. By W. W. Cooper. (*In* Political Science Quarterly, New York, June 1948, pp. 230–256. $1.50.)

The author emphasizes the limitations on public authority for carrying out the purposes of the Federal Employment Act of 1946. He expresses the view that if public responsibility for achieving the objectives of the act are to be met, government must have more flexible powers.

The Labor Force in Louisiana. By Rudolf Heberle. Baton Rouge, Louisiana State University Press, 1948. 189 pp., maps, charts; processed. $2.

Based largely on the Census of 1940, with a final chapter on wartime changes and postwar outlook.

Handicapped Workers

Employment of the Physically Handicapped—Selected References. Compiled by Helen M. Steele and Lola A. Wyckoff. Washington, U. S. Department of Labor, President's Committee on National Employ the Physically Handicapped Week, September 1948. 68 pp.; processed. Free.

The Handicapped Worker in Industry. Princeton, N. J., Princeton University, Industrial Relations Section, September 1948. 4 pp. (Selected References, No. 23.) 10 cents.

The Performance of Physically Impaired Workers in Manufacturing Industries. A Report Prepared by the Bureau of Labor Statistics for the Veterans Administration. Washington, U. S. Bureau of Labor Statistics, 1948. 132 pp., charts, forms. (Bull. No. 923.) 55 cents, Superintendent of Documents, Washington.

Rehabilitation and Placement of Handicapped Workers. Washington, U. S. Bureau of Labor Statistics, 1948. 4 pp. (Serial No. R. 1937; reprinted from Monthly Labor Review, September 1948.) Free.

Rehabilitation Facilities for the Severely Handicapped. Chicago, National Society for Crippled Children and Adults, Inc., Committee on the Severely Handicapped, 1947. 53 pp.; processed.

Selected Employment Service Activities for Handicapped Veterans, 1946–48. Washington, Federal Security Agency, Veterans Employment Service, 1948. 8 pp., charts; processed. Free.

Review of the services offered to disabled veterans in securing suitable gainful employment and of the attempts made to meet special needs as they arose.

Employment of Cardiacs. By Howard B. Sprague, M.D. (*In* Industrial Medicine, Chicago, August 1948, pp. 279–282, bibliography. 75 cents.)

Institute for the Crippled and Disabled—"The School of Another Chance": Summary of results for 1947. New York, Institute for the Crippled and Disabled, 1948. 79 pp., illus.

Includes a discussion of current and past aspects of rehabilitation, and a description of the Institute's efforts to attain its ultimate goal of social and economic independence for the handicapped, through its varied professional and technical services, since its inception in 1917.

Housing

Housing of the Nonwhite Population, 1940 to 1947. Washington, U. S. Housing and Home Finance Agency, 1948. 13 pp., chart. 15 cents, Superintendent of Documents, Washington.

Summary of the 1947 Housing Year. Chicago, National Association of Housing Officials, 1948. 22 pp., bibliography, charts; processed. (N–250.)

The Location and Planning of Housing Developments. By Kenneth Duncan. (*In* Savings Bank Journal, New York, August 1948, pp. 14, 15, 35; September 1948, pp. 26, 27, 41. 50 cents each.)

Part I, on location of housing, shows how subdivisions become stranded because they have not been plotted in relation to the community and to the direction of its growth. Part II, dealing with the closely related question of planning, stresses the need for a high degree of cooperation between municipal authorities and the developer. It cites principles that can be observed profitably by a professional planner.

The Politics of Housing. Radio discussion by Raymond Smith and Louis Wirth. Chicago, University of Chicago, 1948. 29 pp., charts. (Round Table No. 539.)

Includes a supplement containing a summary of the Taft-Ellender-Wagner housing bill and selections from the final majority report of the Joint Committee on Housing (80th Cong., 2d sess., House report No. 1564).

Public Housing. By Buel W. Patch. Washington (1 19th St. NW.), Editorial Research Reports, 1 18 pp. (Vol. II, 1948, No. 4.) $1.

Discussion of the housing issue in Congress and in national political campaigns, and of the terms of exist and pending housing legislation.

Better Housing for the Family. By Beatrice S. Friedm New York, Women's City Club of New York, I 1948. 58 pp., charts, plans, illus. $1.

On the basis of interviews with residents (92 per housewives) of a group of New York housing projects, pamphlet shows in graphic form the importance attac to different facilities.

Fourteenth Annual Report of the New York City Hou Authority. New York, 1948. 24 pp., charts, illus

Covers progress made in the public housing program 1947 and includes operating statistics as well as informa on construction costs.

Industrial Accidents; Workmen's Compensatio

Annual Summary of Injuries in the Petroleum Industry 1947. Washington, American Petroleum Instit Department of Safety, 1948. 20 pp., chart; proces

Injury rates, time lost, and related data on disab injuries are given for 231 oil companies employing 452, persons. The 1947 injury index for the industry was percent lower than in 1946.

Eye Hazards and Safety Practice: A Review of 14,722 Accidents in the Wearside Shipyards. By A. Kefa (*In* British Journal of Industrial Medicine, Lond April 1948, pp. 51–69, illus. 7s. 6d.)

Analyzes classes of injuries and relative acci liability, by occupation, and the relative disabling po of disabling agents.

American Standard Safety Code for Wood Ladders. N York, American Standards Association, 1948. 15 (A14.1–1948.) 50 cents.

NACCA Law Journal, Volume 1, No. 1. Boston, Natio Association of Claimants' Compensation Attorne May 1948. 198 pp. $3.

This initial issue of the journal (to be published in M and November, $5) includes reviews of leading curr cases under workmen's compensation, railroad, admiralty laws; articles on the meaning of "disabili under workmen's compensation acts and on choice remedies by injured maritime workers; a bibliograp and discussion of matters of general interest.

Estadística de los Accidentes del Trabajo, [Domini Republic], 1946. Ciudad Trujillo, Dirección Gen de Estadística, 1948. 36 pp., charts; processed.

Industrial Hygiene

History of Factory and Mine Hygiene. By Ludwig Tele M.D. New York, Columbia University Press, 19 342 pp., bibliography. $4.50.

Analytical account of the development of indust hygiene programs in England, prewar Germany, and

ited States. Subjects treated include legislation, fac- y inspection, and other control measures; the part yed by trade-unions and other organizations in pro- ting workers' health, and the development of plant anization for this purpose; and miners' health prob- s. The latter are given special attention. Researches d studies made in various countries are summarized, and tistical methods in the field are evaluated.

mic Armor. By Ralph P. Eames. (*In* Safety Engineering, New York, August 1948, pp. 26–30, illus. 50 cents.)

Information on measures for protection of workers in diochemical laboratories, including devices for measur- radiation.

ncer of the Respiratory System in the United States Chromate-Producing Industry. By Willard Machle, M.D., and Frederick Gregorius, M.D. (*In* Public Health Reports, Federal Security Agency, Public Health Service, Washington, August 27, 1948, pp. 1114–1127, charts. 10 cents, Superintendent of Documents, Washington.)

Analysis of data on mortality of workers in plants aged in the extraction of chromates from ore revealed high death rate from lung cancer—21.8 percent of all aths in the industry, or 16 times the expected ratio. is is said to be the first study in this field in the United ates.

evention of Health Hazards in Repair Garages. [Olympia], Wash., Department of Labor and Industries and Department of Health, [1948?]. 32 pp., illus.

Summary of health hazards found in a survey of the age industry of the State of Washington, and methods their correction.

licosis, Pneumokoniosis and Dust Suppression in Mines—Proceedings at Conference held in London, April 1947. London, Institution of Mining Engineers and Institution of Mining and Metallurgy, 1947. 190 pp., bibliography, diagrams, illus.

ndardization of the Optical Densities of Industrial Eye-Protective Glasses. By Ralph Stair, U. S. National Bureau of Standards, Washington. (*In* Glass Industry, New York, July 1948, pp. 375–406, bibliography, charts; also reprinted.)

dustrial Relations

e Handbook of Industrial Relations. Edited by John Cameron Aspley and Eugene Whitmore. Chicago, Dartnell Corporation, 1948. 1,254 pp., bibliography, charts, illus. $10.

Third edition of a standard reference work on various ases of industrial relations and personnel management. e 56 sections cover a wide range of subjects, including nds in labor relations, contract clauses, employment ocedures and practices, employee benefits and activities, d public relations.

Joint Production Committees, January 1948. By Frank S. McElroy and Alexander Moros. Washington, U. S. Bureau of Labor Statistics, 1948. 5 pp., chart. (Serial No. R. 1931; reprinted from Monthly Labor Review, August 1948.) Free.

Labor-Management Cooperation in United States War Production—A Study of Methods and Procedure. Geneva, International Labor Office, 1948. 405 pp. (Studies and Reports, New Series, No. 6.) $2.25. Distributed in United States by Washington Branch of ILO.

Proceedings of Conference on Industry-Wide Collective Bargaining, Philadelphia, May 14, 1948. Philadelphia, University of Pennsylvania, Wharton School of Finance and Commerce, Labor Relations Council, 1948. 144 pp., charts; processed. $3.

Complete transcript of the proceedings of the general session and of the three committee meetings. The latter dealt with the economic and legal aspects, respectively, of industry-wide collective bargaining and with multiple-employer bargaining in action.

The Termination Report of the National War Labor Board: Industrial Disputes and Wage Stabilization in Wartime, January 12, 1942–December 31, 1945, Volume I. Washington, 1947. 1,213 pp. $2.50, Superintendent of Documents, Washington.

Part I covers organization, policies, and procedure of the National War Labor Board, and action taken on specific issues; Part II contains reports of chairmen of the regional boards, expressing their views on many aspects of the Board's work, and studies of Board policy in selected industries which were treated on a special basis.

Volumes II and III, which will be published as appendixes to Volume I, will consist of selected policy statements, regulations, and opinions in leading cases handled by the Board. Those in Volume II will pertain for the most part to over-all policy and those in Volume III, to specific industries.

Classified Provisions of Thirty-Seven Collective Bargaining Agreements for Wage Earners in the Iron and Steel Industry. New York, American Iron and Steel Institute, 1948. 745 pp.

Collective Bargaining Provisions: Discharge, Discipline, and Quits; Dismissal Pay. Washington, U. S. Bureau of Labor Statistics, 1948. 63 pp. (Bull. No. 908–5.) 20 cents, Superintendent of Documents, Washington.

Public Utility Labor Problems. By Clarence M. Updegraff. (*In* Iowa Law Review, Iowa City, May 1948, pp. 609–622. $1.)

La Participation des Salariés aux Responsabilités de l'Entrepreneur. Paris, Institut de Science Économique Appliquée, 1947. 217 pp. 240 francs.

This discussion of worker participation in management in France was written before enactment of the legislation of February 1945 providing for the establishment of works

councils (Comités d'Entreprise). Two ways are suggested to overcome human obstacles to greater labor participation in management: (1) by assuring workers of security and thus reducing their fear of the future, apprehensions on the part of labor in its relations with management may be overcome; and (2) by having workers assume certain risks and responsibilities, thus more closely uniting them with those from whom they consider themselves separated.

(*See also* under Labor Management Relations Act, 1947.)

Labor Management Relations Act, 1947

How to Handle Collective Bargaining Negotiations Under the Taft-Hartley Act. By Arthur T. Jacobs, and staff of Executive's Labor Service. Deep River, Conn., National Foremen's Institute, Inc., 1948. 132 pp.

The Implications for Executives in the 1947 Labor-Management Relations Act. By John R. Bangs and James W. Townsend. Philadelphia, Budd Co., [1948]. 20 pp.
Address at 68th annual meeting of American Society of Mechanical Engineers in Atlantic City, December 5, 1947.

The Periodical Press and the Taft-Hartley Act. By Philip Ash. (*In* Public Opinion Quarterly, Vol. 12, No. 2, Princeton, N. J., Summer 1948, pp. 266–271. $1.50.)
An attempt to answer, objectively, the question: "If an individual read magazine articles concerning the Taft-Hartley Act, would he have been more likely to read articles that approved the Act * * * or that disapproved the Act * * *?" As the result of an analysis of articles in 180 issues of 50 different periodicals, with a circulation of over 21,500,000, the author concluded that "the viewpoints of organized labor, presented in positive terms, did not appear in any of the major periodicals of wide circulation."

Temporary Injunction of Union Unfair Labor Practices Under the Taft-Hartley Act. (*In* Illinois Law Review, Chicago, May–June 1948, pp. 231–238.)

Labor Organizations and Activities

Directory of Labor Unions in the United States—National and International Unions, State Labor Organizations—June 1948. Washington, U. S. Bureau of Labor Statistics, 1948. 64 pp. (Bull. No. 937.) 20 cents, Superintendent of Documents, Washington.

British Labor under the Labor Government. By Jean A. Flexner. Washington, U. S. Bureau of Labor Statistics, 1948. 13 pp., charts. (Serial No. R. 1930; reprinted from Monthly Labor Review, August and October 1948.) Free.

Colonial Policy of the British Labor Party. By Peter C. Speers. (*In* Social Research, New York, September 1948, pp. 304–326. $1.)

Fifty-First Annual Report of the Scottish Trades Union Congress, 1948, Including Report of Organization of Women Committee and Report of Youth Advisory Council. Glasgow, Scottish Trades Union Congress, 1948. 164 pp. 1s.

The Origins of the Russian-Jewish Labor Movement. A. L. Patkin. Melbourne and London, F. Cheshire Pty., Ltd., 1947. 275 pp. 15s. ($3.50, Blo Publishing Co., Inc., New York).
Account of the origins of the Jewish labor social movement in Russia, against a background of the histo and aspirations of the Jewish people.

Medical Care

Comparative Increases in the Costs of Medical Care and the Costs of Living. By Frank G. Dickinson. C cago, American Medical Association, Bureau Medical Economic Research, 1948. 4 pp., char Free.
Compares the cost of selected medical services f moderate-income families with the cost of all goods a services combined, 1940–47, as shown by published da of the U. S. Bureau of Labor Statistics.

The Nation's Health. A report to the President by Os R. Ewing, Federal Security Administrator. Was ington, Federal Security Agency, 1948. 186 p charts. $1, Superintendent of Documents, Washi ton.
An evaluation of the Nation's total health and medi facilities, with recommendations for a basic Feder State-community program to meet health needs duri the next decade. Objectives are increased medical p sonnel and hospitals, adequate medical care through p paid, tax-supported health insurance, and enlarged p grams covering mental health, chronic diseases, rehabili tion of the handicapped, and maternal and child welfa

Some Labor Union Enterprises in Public Health Economi By B. A. Kogan, M.D. (*In* American Journal Public Health, New York, July 1948, pp. 943–9 70 cents.)
Discussion of the development of health institutes a allied measures for health protection undertaken by t United Automobile Workers, International Ladies' G ment Workers' Union, Amalgamated Clothing Worke and the Transport Workers Union.

Voluntary Medical Care Insurance in the United Sta By Franz Goldmann, M.D. New York, Colum University Press, 1948. 228 pp., bibliography.
Describes and analyzes the development and prese status of voluntary medical care insurance in this count and appraises the most important prepayment types.

Medical and Hospital Services Provided under Prepaym Arrangements, Trinity Hospital, Little Rock, Ar 1941–42. By Margaret C. Klem, Helen Hollin worth, Zelma A. Miser. Washington, Federal S curity Agency, Social Security Administration, Bure of Research and Statistics, 1948. 276 pp.; processe (Bureau Memorandum No. 69.)
Detailed data on types and amounts of services p vided, together with information on the families serve based on a period of 24 consecutive months.

Medical Facilities and Employee Group Benefits in Connecticut Industry. Hartford, Manufacturers Association of Connecticut, Inc., 1948. 16 pp.

Medical Services in New Zealand. By Hugh MacLean, M.D., and Dean E. McHenry. (*In* Milbank Memorial Fund Quarterly, New York, April 1948, pp. 148–181, bibliography. 25 cents.)

Traces the development of the national medical care program in New Zealand, describes the various health benefits and services under the Social Security Act, and discusses the position of the medical profession with reference to the program.

Migration

International Labor Conference, 32d Session, Geneva, 1949—Eleventh Item on Agenda, Report XI (1): Migration for Employment. Geneva, International Labor Office, 1948. 218 pp. $1.25. Distributed in United States by Washington Branch of ILO.

International Migration and One World. New York, National Committee on Immigration Policy, 1948. 107 pp., bibliography, charts. 25 cents.

The National Committee on Immigration Policy describes its purposes as educational, and the present study is one of a series in furtherance of its educational objective. The study summarizes the national immigration policies of various countries and the results of international migration since 1820, with emphasis on the period following World War II and on the need for reconsideration of immigration policies.

Some Aspects of the International Migration Problem. By Alfred Sauvy. (*In* International Labor Review, Geneva, July 1948, pp. 18–37. 50 cents. Distributed in United States by Washington Branch of ILO.)

Occupation Reports

Economic Status of Ceramic Engineers, 1939 to 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 26 pp., charts; processed. Free.

Survey of members of the Institute of Ceramic Engineers.

The Economic Status of Registered Professional Nurses, 1946–47. Washington, U. S. Bureau of Labor Statistics, 1948. 69 pp., map, charts. (Bull. No. 931.) 30 cents, Superintendent of Documents, Washington.

Salaries and Conditions of Work of Social Workers [in Great Britain]. London, National Council of Social Service, 1947. 86 pp. 2s. 6d.

Report by a joint committee of British Federation of Social Workers and National Council of Social Service.

Prices and Price Control

Consumers' Price Index [of Bureau of Labor Statistics]: Relative Importance of Components. Washington, U. S. Bureau of Labor Statistics, 1948. 5 pp. (Serial No. R. 1933; reprinted from Monthly Labor Review, August 1948.) Free.

Agricultural Price Policy. By Geoffrey S. Shepherd. Ames, Iowa State College Press, 1947. 440 pp., charts. $4.50.

In part a revision of the author's Agricultural Price Control (1945). Three main purposes are stated: analysis of experiences of the past 20 years; appraisal of the present and prospective agricultural price situation; and a statement of desirable objectives and of the broad outlines of price programs for attaining the objectives. The chief aim of agricultural price policy, it is stated, should be correction of the shortcomings of prices as determined by the unregulated or open market for farm products, and maintenance of reasonably stable incomes for farmers currently comparable with the incomes of other groups with similar ability. The author views as fallacious the idea that average farm income should equal average nonfarm income, and he criticizes also the use of the 1909–14 base period for evaluating price and income parity. The farm problem is viewed in general in the light of the tendency toward overpopulation on farms and of the need for sustained nonfarm prosperity and employment opportunities.

The History of Basic Metals Price Control in World War II. By Robert F. Campbell. New York, Columbia University Press, 1948. 263 pp., bibliography. (Studies in History, Economics, and Public Law, No. 541.) $3.25.

The anti-inflation measures used during the years 1941–45 are summarized in the introduction, which is followed by discussion of the price reaction of basic metals to wartime pressures and of the various steps taken to alleviate these pressures by increasing the available metal supplies while maintaining the same general price level. The author concluded that price control should be closely integrated with allocation of manpower and materials, management of production, and stabilization of wages.

Consumers' Price Indexes for Foods Commonly Purchased by Wage Earners' Families in Puerto Rico, March 1941 to March 1948 (March 1941=100). [San Juan], Puerto Rico Department of Labor, Bureau of Labor Statistics, 1948. 34 pp., charts; processed. (Special Release No. 9.)

Index of Retail Prices [in Great Britain]. London, Ministry of Labor and National Service, 1948. 30 pp. (Supplement No. 2, January 1948, to Industrial Relations Handbook, 1944.) 6d. net, H. M. Stationery Office, London.

Describes methods of calculating the new British retail price index, established in June 1947.

Unemployment Insurance

Handbook on State Unemployment Compensation Laws. Washington, Federal Security Agency, Social Security Administration, Bureau of Employment Security, September 1, 1947. 121 pp.; processed.

Principles of Cost Estimates in Unemployment Insurance. By W. S. Woytinsky. Washington, Federal Security Agency, Social Security Administration, Bureau of Employment Security, 1948. 174 pp., charts. Free.

Discusses effects of labor market, statutory, and administrative factors on the operation of unemployment insurance, and estimates benefit costs of various programs over a hypothetical business cycle.

The Principles Which Should Govern the Structure and Provisions of a Scheme of Unemployment Insurance. By A. D. Watson. Ottawa, Unemployment Insurance Commission, 1948. 45 pp.

The Development of Unemployment Insurance in the South. By William R. Curtis. (*In* Southern Economic Journal, Chapel Hill, N. C., July 1948, pp. 43–53. $1.)

Estimated Employment and Wages of Workers Covered by State Unemployment Insurance Laws, 1947. Washington, Federal Security Agency, Social Security Administration, Bureau of Employment Security, 1948. 15 pp.; processed. (Supplement to Employment Security Activities, June 1948.)

Geographic Distribution of Unemployment and Sickness Benefits [for Railroad Workers] in 1947. (*In* Monthly Review, U. S. Railroad Retirement Board, Chicago, June 1948, pp. 115–120, map, chart.)

Wages and Hours of Labor

Trends in Wage Differentials, 1907–47. Washington, U. S. Bureau of Labor Statistics, 1948. 21 pp., charts. (Serial No. R. 1932; reprinted from Monthly Labor Review, April, June, August 1948.) Free.

Union Wages and Hours: The Baking Industry, July 1, 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 37 pp. (Bull. No. 936.) 20 cents, Superintendent of Documents, Washington.

Union Wages and Hours: Building Trades, July 1, 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 36 pp. (Bull. No. 930.) 20 cents, Superintendent of Documents, Washington.

A Survey of Office Salaries—A Study of Salaries Paid by 501 Companies. Chicago, Dartnell Publications, Inc., 1948. 64 pp.

Report on methods of controlling office salaries, with a statistical supplement showing weekly salary ranges in individual occupations and reporting companies, by number of office employees and geographic division.

Office Workers' Salaries, Hours of Work, Supplementary Benefits, New York, N. Y., January–February 1948. Washington, U. S. Bureau of Labor Statistics, 1948. Variously paged, chart; processed. Free.

Pay Rates for Selected City Jobs, [January 1948]. (*In* Municipal Year Book, 1948, pp. 107–111. Chicago, International City Managers' Association, 1948. $9.)

Data for clerks, laborers, truck drivers, firemen, policemen, and other classifications, by city.

Salaries and Working Conditions of Policemen in Various Virginia Police Departments. Richmond, League of Virginia Municipalities, May 1948. 21 pp.; processed. (Report No. 309.) 75 cents.

Behavior of Wages. By Jules Backman and M. R. Gainsbrugh. New York, National Industrial Conference Board, Inc., 1948. 96 pp., charts. (Studies in Business Economics, No. 15.) $1.

An argument against uniform, "horizontal", or "blanket" wage increases and in favor of adjustments on the basis of local or industry conditions.

The National Wage Stabilization Board, January 1, 1946–February 24, 1947. Washington, U. S. Government Printing Office, [1947?]. 594 pp. (Historical Reports on War Administration.) $1.25.

Documentary history of the Board together with brief explanations of its formation, organization, and activities.

Earnings of African Labor in November 1947. Nairobi, East African Statistical Department, 1948. 69 pp., charts; processed.

Estadística del Salario en Ciudad Trujillo, [Dominican Republic], Noviembre 1946. Ciudad Trujillo, Dirección General de Estadística, 1948. 45 pp., charts; processed.

Women in Industry

Report on 1948 Women's Bureau Conference, February 17–19, 1948: The American Woman—Her Changing Role—Worker, Homemaker, Citizen. Washington, U. S. Department of Labor, Women's Bureau, 1948. 210 pp., charts, illus. (Bull. No. 224.) Free.

The Outlook for Women in Chemistry. Washington, U. S. Department of Labor, Women's Bureau, 1948. 60 pp., bibliography, illus. (Bull. No. 223–2.) 20 cents, Superintendent of Documents, Washington.

One of a series of eight bulletins on the outlook for women in science. Other bulletins already issued cover the biological sciences, mathematics and statistics, physics and astronomy, and occupations related to science. The three remaining numbers in the series will deal, respectively, with architecture and engineering; geology, geography, and meteorology; and the over-all picture.

Women Who Work at Night. New York, State Department of Labor, Division of Industrial Relations, Women in Industry and Minimum Wage, 1948. 47 pp., processed.

Summary of the characteristics of women on night shifts in New York, and of conditions under which they work, based on a survey of 347 workers in 20 manufacturing plants.

Employment of Women. (*In* Planning, London, July 23, 1948, pp. 37–60. Reprints are available from New Republic, New York, at 25 cents each.)

Size, composition, and industrial distribution of the female labor force in Great Britain, women's attitudes toward industrial employment, and part-time work are the major topics covered.

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A: Employment and Pay Rolls

TABLE A-1: Estimated Total Labor Force Classified by Employment Status, Hours Worked, and Sex

Labor force	Estimated number of persons 14 years of age and over [1] (in thousands)												
	1948									1947			
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.
Total, both sexes													
Total labor force [2]	63,578	64,511	65,135	64,740	61,660	61,760	61,005	61,004	60,455	60,870	61,510	62,219	62,130
Civilian labor force	62,212	63,186	63,842	63,479	60,422	60,524	59,769	59,778	59,214	59,590	60,216	60,892	60,784
Unemployment	1,899	1,941	2,227	2,184	1,761	2,193	2,440	2,639	2,065	1,643	1,621	1,687	1,912
Employment	60,312	61,245	61,615	61,296	58,660	58,330	57,329	57,139	57,149	57,947	58,595	59,204	58,872
Nonagricultural	51,590	52,801	52,452	51,899	50,800	50,883	50,482	50,368	50,089	50,985	50,609	50,583	50,145
Worked 35 hours or more	30,372	42,305	32,404	43,240	42,726	42,179	42,576	40,977	42,242	43,144	42,616	43,102	42,796
Worked 15-34 hours	17,149	4,811	12,147	4,910	4,886	4,902	4,467	5,255	4,614	4,674	5,147	4,534	3,988
Worked 1-14 hours [3]	1,596	1,447	1,394	1,403	1,637	1,776	1,684	1,798	1,513	1,631	1,470	1,391	1,312
With a job but not at work [4]	2,472	4,239	6,508	2,348	1,550	2,027	1,753	2,338	1,721	1,534	1,376	1,556	2,050
Agricultural	8,723	8,444	9,163	9,396	7,861	7,448	6,847	6,771	7,060	6,962	7,985	8,622	8,727
Worked 35 hours or more	6,705	6,122	7,011	7,390	5,936	5,670	4,754	3,844	4,729	4,590	5,709	6,867	7,297
Worked 15-34 hours	1,636	1,669	1,767	1,669	1,513	1,336	1,397	1,759	1,765	1,631	1,781	1,383	1,077
Worked 1-14 hours [3]	218	249	203	182	201	187	265	386	250	320	298	204	165
With a job but not at work [4]	165	405	184	154	211	255	431	782	315	421	198	167	187
Males													
Total labor force [2]	45,453	46,525	46,715	46,039	44,519	44,589	44,228	44,236	44,071	44,156	44,426	44,754	44,881
Civilian labor force	44,101	45,215	45,437	44,794	43,298	43,369	43,009	43,026	42,846	42,892	43,148	43,443	43,551
Unemployment	1,251	1,326	1,448	1,375	1,239	1,567	1,765	1,889	1,574	1,239	1,176	1,183	1,393
Employment	42,850	43,889	43,989	43,420	42,058	41,801	41,244	41,137	41,273	41,653	41,972	42,260	42,158
Nonagricultural	35,960	36,836	36,633	36,162	35,386	35,352	35,063	35,046	35,018	35,484	35,323	35,340	35,202
Worked 35 hours or more	23,115	31,226	24,344	31,700	31,006	30,575	30,649	29,592	30,719	31,147	31,020	31,476	31,232
Worked 15-34 hours	10,577	2,599	7,766	2,535	2,565	2,525	2,390	2,800	2,414	2,411	2,709	2,212	2,094
Worked 1-14 hours [3]	646	563	563	597	709	787	729	899	610	738	622	630	522
With a job but not at work [4]	1,622	2,448	3,962	1,332	1,105	1,465	1,294	1,755	1,275	1,187	972	1,022	1,355
Agricultural	6,890	7,053	7,356	7,257	6,673	6,450	6,181	6,091	6,254	6,169	6,649	6,920	6,955
Worked 35 hours or more	5,858	5,663	6,152	6,310	5,525	5,321	4,548	3,698	4,505	4,376	5,236	5,913	6,175
Worked 15-34 hours	743	882	903	707	862	816	1,035	1,375	1,255	1,177	1,638	736	523
Worked 1-14 hours [3]	138	179	145	111	136	124	211	330	202	252	194	128	87
With a job but not at work [4]	151	330	157	129	150	189	387	688	292	364	180	142	169
Females													
Total labor force [2]	18,125	17,986	18,420	18,701	17,141	17,171	16,777	16,768	16,384	16,714	17,084	17,465	17,249
Civilian labor force	18,111	17,971	18,405	18,685	17,124	17,155	16,760	16,752	16,368	16,698	17,068	17,449	17,233
Unemployment	648	615	779	809	522	626	675	750	491	404	445	504	519
Employment	17,462	17,356	17,626	17,876	16,602	16,529	16,085	16,002	15,876	16,294	16,623	16,944	16,714
Nonagricultural	15,630	15,965	15,819	15,737	15,414	15,531	15,419	15,322	15,071	15,501	15,286	15,243	14,943
Worked 35 hours or more	7,257	11,079	8,060	11,540	11,720	11,604	11,927	11,385	11,523	11,997	11,596	11,626	11,564
Worked 15-34 hours	6,572	2,212	4,381	2,375	2,321	2,377	2,077	2,455	2,200	2,263	2,438	2,322	1,894
Worked 1-14 hours [3]	950	884	831	806	928	989	955	899	903	893	848	761	790
With a job but not at work [4]	850	1,791	2,546	1,016	445	562	459	583	446	347	404	534	695
Agricultural	1,833	1,391	1,807	2,139	1,188	998	666	680	806	793	1,336	1,702	1,772
Worked 35 hours or more	847	459	859	1,080	411	349	206	146	224	214	473	954	1,122
Worked 15-34 hours	893	787	864	962	651	520	362	384	510	454	743	647	554
Worked 1-14 hours [3]	80	70	58	71	65	63	54	56	48	68	104	76	78
With a job but not at work [4]	14	75	27	25	61	66	44	94	23	57	18	25	18

[1] Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

[2] Total labor force consists of the civilian labor force and the armed forces.

[3] Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

[4] Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute, or because of temporary lay-off with definite instructions to return to work within 30 days of lay-off. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.

NOTE.—Explanatory notes outlining briefly the concepts, methodology, size of the reporting sample, and sources used in preparing data presented in tables A-2 through A-14 are contained in the Bureau's monthly mimeographed release, "Employment and Pay Rolls—Detailed Report," which is available upon request. Fuller discussion is contained in the Handbook of Labor Statistics (Bulletin 916).

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TABLE A–2: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, b Industry Division [1]

[In thousands]

Industry division	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	19
Total estimated employment	45,898	45,487	45,078	45,009	44,616	44,299	44,600	44,279	44,603	45,618	44,918	44,758	44,513	42,042	30,
Manufacturing	16,704	16,451	16,158	16,115	15,892	15,950	16,269	16,183	16,267	16,354	16,256	16,209	16,175	17,381	10,
Mining	948	950	921	950	935	817	924	914	922	925	923	922	921	917	
Anthracite	82	83	81	82	81	82	82	81	81	81	81	81	81	83	
Bituminous coal	426	425	395	426	423	309	419	415	422	421	417	415	412	437	
Metal	100	99	102	104	102	103	102	101	100	100	100	99	100	126	
Quarrying and nonmetallic	98	97	97	97	95	93	90	87	89	94	96	97	98	90	
Crude petroleum and natural gas production [2]	242	246	246	241	234	230	231	230	230	229	229	230	230	181	
Contract construction [3]	2,240	2,257	2,219	2,173	2,052	1,933	1,805	1,731	1,871	1,978	2,046	2,099	2,107	1,567	1,
Transportation and public utilities [4]	4,093	4,137	4,136	4,105	4,042	3,974	4,032	4,019	4,020	4,071	4,077	4,097	4,134	3,619	2,
Transportation [4]	2,833	2,867	2,873	2,860	2,809	2,744	2,808	2,802	2,809	2,858	2,872	2,899	2,929	2,746	2,
Communication	741	747	745	734	731	731	728	723	719	719	713	707	713	488	
Other public utilities	519	523	518	511	502	499	496	494	492	494	492	491	492	385	
Trade	9,733	9,659	9,646	9,670	9,617	9,576	9,598	9,520	9,622	10,288	9,886	9,684	9,471	7,322	6,
Finance	1,732	1,761	1,754	1,726	1,716	1,704	1,697	1,690	1,680	1,676	1,673	1,671	1,668	1,401	1,
Service	4,647	4,622	4,645	4,663	4,738	4,768	4,729	4,730	4,723	4,688	4,670	4,662	4,634	3,786	3,
Government [4]	5,801	5,650	5,599	5,607	5,624	5,577	5,546	5,492	5,498	5,638	5,387	5,414	5,403	6,049	3,
Federal	1,873	1,855	1,833	1,804	1,788	1,771	1,758	1,746	1,743	1,985	1,751	1,744	1,761	2,875	
State and local [4]	3,928	3,795	3,766	3,803	3,836	3,806	3,788	3,746	3,755	3,653	3,636	3,670	3,642	3,174	3,

[1] Estimates are based upon reports submitted by cooperating establishments and therefore differ from employment information obtained by household interviews, such as the Monthly Report on the Labor Force. The Bureau of Labor Statistics estimates of employment in nonagricultural establishments differ from those of the Monthly Report on the Labor Force (table A–1) in several important respects. The Bureau of Labor Statistics estimates cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month, in Federal establishments during the pay period ending just before the first of the month, and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once. Proprietors, self-employed persons, domestic servants, unpaid family workers, and personnel of the armed forces are excluded. These estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consist series. Data for the current and immediately preceding months are subj to revision.

[2] Includes well drilling and rig building.

[3] These figures cover all employees of private firms whose major activity construction. They are not directly comparable with the construction e ployment estimates presented in table 2, p. 1111, of the June 1947 issue of t publication, which include self-employed persons, working proprietors, a force-account workers and other employees of nonconstruction firms or pub bodies who engage in construction work, as well as all employees of e struction firms. An article presenting this other construction employm series appeared in the August 1947 issue of this publication, and will appe quarterly thereafter.

[4] Figures are not strictly comparable with those of preceding months b cause of the transfer of some companies from private to municipal operati in October 1947.

TABLE A–3: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Majo Industry Group [1]

[In thousands]

Major industry group	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	19
All manufacturing	16,704	16,451	16,158	16,115	15,892	15,950	16,269	16,183	16,267	16,354	16,256	16,209	16,175	17,381	10,
Durable goods	8,292	8,188	8,153	8,122	8,114	8,164	8,258	8,167	8,256	8,274	8,194	8,126	8,070	10,297	4,
Nondurable goods	8,412	8,263	8,005	7,993	7,778	7,786	8,011	8,016	8,011	8,080	8,062	8,083	8,105	7,084	5,
Iron and steel and their products	1,947	1,929	1,897	1,904	1,894	1,897	1,929	1,920	1,925	1,922	1,908	1,896	1,892	2,034	1,
Electrical machinery	726	717	714	726	727	742	756	763	767	773	772	763	752	914	
Machinery, except electrical	1,570	1,555	1,560	1,577	1,568	1,562	1,587	1,591	1,583	1,589	1,569	1,565	1,560	1,585	
Transportation equipment, except automobiles	574	543	561	562	565	589	589	589	598	591	578	552	540	2,951	
Automobiles	977	958	983	918	964	979	985	914	989	983	961	964	960	845	
Nonferrous metals and their products	469	466	457	469	467	475	482	478	478	482	479	472	468	525	
Lumber and timber basic products	930	930	912	881	851	833	827	813	816	829	828	827	821	589	
Furniture and finished lumber products	558	551	542	550	548	561	576	581	580	578	573	565	557	429	
Stone, clay, and glass products	541	539	527	535	530	526	527	518	520	527	526	522	520	422	
Textile-mill products and other fiber manufactures	1,384	1,397	1,364	1,418	1,416	1,425	1,435	1,428	1,413	1,409	1,391	1,368	1,341	1,330	1,
Apparel and other finished textile products	1,354	1,334	1,235	1,263	1,247	1,268	1,334	1,333	1,311	1,305	1,277	1,287	1,251	1,080	
Leather and leather products	424	431	422	419	404	418	442	448	445	446	442	438	435	378	
Food	2,076	1,965	1,900	1,786	1,610	1,562	1,655	1,658	1,688	1,735	1,769	1,833	1,964	1,418	1,
Tobacco manufactures	101	99	96	98	97	99	100	101	101	102	104	103	100	103	
Paper and allied products	484	478	476	477	476	476	480	479	482	484	479	476	470	389	
Printing, publishing, and allied industries	725	718	716	719	718	718	722	724	726	732	726	720	713	549	
Chemicals and allied products	784	773	751	762	759	767	773	773	774	778	777	773	763	873	
Products of petroleum and coal	244	247	247	245	242	238	238	237	238	238	239	237	238	170	
Rubber products	247	244	240	243	243	246	253	257	259	261	259	257	252	231	
Miscellaneous industries	589	577	558	563	566	569	579	578	574	590	599	591	578	563	

[1] Estimates include all full- and part-time production and nonproduction workers in manufacturing industries who worked or received pay during the pay period ending nearest the 15th of the month. These estimates have been adjusted to levels indicated by Federal Security Agency data through 19 and have been carried forward from 1946 bench-mark levels, thereby provi ing consistent series.

TABLE A-4: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State [1]

[In thousands]

Region and State	1948								1947					Annual average 1943 [2]
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	
New England:														
Maine [3]	120.2	116.5	115.2	108.2	106.7	115.2	116.5	116.9	118.5	117.4	116.9	119.6	119.4	144.4
New Hampshire	83.6	82.1	82.7	81.6	82.6	84.4	85.6	85.8	85.3	83.9	82.9	82.1	80.7	77.0
Vermont [3]	37.8	37.0	37.8	37.8	38.1	38.7	38.8	39.1	40.0	39.5	39.3	39.2	39.1	41.3
Massachusetts	725.5	710.0	726.1	723.4	729.7	745.7	746.0	747.3	757.2	753.2	741.6	732.5	720.4	835.6
Rhode Island	144.1	144.8	146.5	147.0	149.9	153.6	154.5	153.5	154.6	154.3	152.9	148.1	143.0	169.4
Connecticut [3]	392.1	393.3	396.5	401.1	406.4	412.5	412.1	413.2	417.8	415.7	414.8	409.2	406.0	504.2
Middle Atlantic:														
New York	1,869.6	1,816.5	1,831.7	1,829.0	1,850.4	1,902.6	1,906.4	1,905.8	1,924.6	1,918.6	1,922.8	1,900.1	1,870.8	2,115.7
New Jersey	743.9	732.8	741.8	740.7	746.0	753.7	757.8	757.3	764.0	757.4	751.4	749.2	735.9	951.1
Pennsylvania	1,498.0	1,481.2	1,495.4	*1,489.4	*1,497.5	*1,514.3	*1,513.1	*1,515.6	1,527.3	1,523.1	1,517.9	1,504.5	1,490.7	1,579.3
East North Central:														
Ohio	1,224.6	1,216.4	1,228.2	1,221.3	1,230.7	1,244.0	1,243.9	1,246.0	1,250.9	1,247.3	1,244.7	1,244.0	1,238.1	1,363.3
Indiana	548.6	544.1	546.4	541.9	540.0	552.8	553.4	556.3	559.0	558.7	561.0	580.0	552.3	633.1
Illinois	1,231.0	1,227.4	1,228.7	1,203.5	1,198.0	1,253.5	1,267.0	1,271.0	1,273.6	1,266.3	1,257.0	1,249.0	1,237.8	1,263.7
Michigan	987.5	996.8	962.7	998.5	1,002.7	1,010.9	970.7	1,019.6	1,024.2	1,019.0	1,021.8	1,023.3	1,004.6	1,181.8
Wisconsin [3]	434.4	447.9	429.7	420.0	426.3	432.5	434.2	433.9	436.1	433.1	433.3	452.0	446.6	442.8
West North Central:														
Minnesota [3]	210.0	206.6	203.3	190.9	188.7	198.0	199.0	200.0	202.0	201.3	200.2	210.6	206.8	215.1
Iowa [3]	153.0	152.1	149.8	135.1	133.8	153.7	154.7	155.5	156.3	153.9	151.3	152.3	151.3	161.7
Missouri [3]	349.1	345.7	343.9	339.3	339.9	346.6	349.2	350.3	351.7	352.7	351.9	348.7	348.9	412.9
North Dakota	6.8	7.0	7.1	6.7	6.4	6.3	6.4	6.6	6.7	6.8	6.7	6.7	6.9	5.6
South Dakota	11.7	11.8	11.9	11.3	11.3	11.0	11.1	11.2	11.3	11.5	11.4	11.3	11.5	10.3
Nebraska	43.1	43.6	43.0	36.1	34.9	42.4	43.0	43.8	46.3	45.9	45.1	43.1	43.2	60.8
Kansas	84.5	83.9	84.5	77.0	73.3	77.6	78.3	80.5	81.9	79.9	79.8	79.4	80.0	144.2
South Atlantic:														
Delaware	47.9	46.6	46.6	45.8	*46.6	46.5	45.9	45.7	46.1	45.8	45.8	48.2	48.4	55.2
Maryland	239.2	232.8	229.4	228.5	228.2	228.9	228.5	226.9	229.6	231.1	229.3	232.4	228.2	348.8
District of Columbia	16.7	17.2	17.1	17.2	17.4	17.1	16.8	17.3	17.5	17.4	17.5	17.5	17.3	15.6
Virginia	214.7	211.5	211.1	210.8	212.8	213.7	213.5	213.6	215.1	217.3	217.0	214.5	211.5	231.9
West Virginia	133.7	133.3	133.9	132.4	131.9	130.9	130.3	132.4	132.5	133.0	133.4	132.8	132.5	132.2
North Carolina	378.9	362.9	381.7	381.4	382.6	385.8	380.4	382.7	380.8	378.7	374.1	368.1	366.6	399.9
South Carolina	197.0	195.8	200.5	199.3	199.3	200.5	196.9	198.3	198.9	197.6	194.8	192.3	192.0	191.8
Georgia [3]	280.9	274.3	275.7	273.8	276.4	281.5	280.5	281.7	280.4	283.5	280.3	281.6	278.3	302.9
Florida [3]	88.2	88.0	90.0	93.2	96.5	99.4	98.9	100.3	97.8	95.0	90.4	88.6	86.8	136.0
East South Central:														
Kentucky	127.4	126.8	127.0	125.9	128.2	129.5	129.4	129.5	130.4	130.7	130.3	128.2	125.8	131.7
Tennessee [3]	258.9	255.6	255.7	258.0	257.7	259.9	256.1	255.4	254.7	254.3	254.1	252.6	252.0	255.9
Alabama [3]	228.3	228.9	227.4	*227.2	*226.5	*230.9	*230.2	*232.7	*230.9	*230.8	*227.9	*225.4	*220.3	258.5
Mississippi	90.6	91.3	89.5	88.1	88.6	90.0	90.5	95.5	95.7	95.5	94.1	95.0	95.3	95.1
West South Central:														
Arkansas [3]	76.8	75.6	76.6	75.1	74.8	74.3	74.4	75.3	76.1	*76.8	*76.7	81.2	*82.9	76.7
Louisiana [3]	153.6	148.2	149.4	146.0	147.5	145.8	142.5	150.2	151.2	153.1	149.2	149.5	150.3	166.1
Oklahoma [3]	66.9	66.7	68.9	65.2	65.5	62.6	62.6	64.0	64.7	64.9	64.3	64.1	64.0	99.7
Texas	354.1	352.9	354.8	341.7	338.7	337.1	340.2	342.9	346.8	347.6	339.9	337.8	341.3	424.8
Mountain:														
Montana	18.0	18.1	17.7	17.1	17.1	17.2	17.3	17.7	18.5	18.7	19.1	18.1	18.2	15.7
Idaho [3]	20.1	20.6	18.8	18.1	16.7	16.9	17.6	18.2	19.5	21.2	22.4	22.6	23.8	15.9
Wyoming	6.8	6.8	6.8	6.5	6.3	6.2	6.1	6.1	7.0	7.2	7.1	6.8	6.8	5.1
Colorado	56.9	56.5	56.3	53.3	54.0	55.5	55.1	57.2	61.0	60.3	60.6	57.9	56.6	67.5
New Mexico [3]	10.5	10.4	10.0	9.3	8.8	8.2	8.2	8.3	8.6	8.6	8.8	9.1	9.3	7.9
Arizona [3]	15.7	15.8	16.0	15.7	15.3	14.8	14.6	14.7	14.7	14.6	14.0	13.8	13.4	19.4
Utah	27.4	28.7	26.0	24.2	22.6	23.9	23.9	25.1	26.8	27.3	29.4	30.1	26.3	33.5
Nevada [3]	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.5	3.5	3.4	3.4	7.9
Pacific:														
Washington	183.1	179.9	163.4	152.4	175.3	173.7	173.0	173.0	174.6	178.2	183.9	191.7	185.0	285.6
Oregon	121.2	117.3	112.8	110.7	110.2	110.2	109.2	109.8	111.4	112.2	117.2	122.2	122.4	192.1
California	770.9	741.3	713.0	696.3	695.8	700.4	703.5	705.0	715.1	717.7	736.4	744.8	760.2	1,165.5

[1] Revised data in all except the first three columns are identified by an asterisk for the first month's publication of such data. Comparable series, January 1943 to date, available upon request to U. S. Department of Labor, or cooperating State Agency listed below.

[2] 1943 averages may not be strictly comparable with current data for those states now based on Standard Industrial Classification.

[3] Series based on Standard Industrial Classification. Data for Tennessee, may not be strictly comparable with those published prior to the current report.

* Revised.

Cooperating State Agencies:

Alabama—Department of Industrial Relations, Montgomery 5.
Arizona—Unemployment Compensation Division, Employment Security Commission, Phoenix.
Arkansas—Employment Security Division, Department of Labor, Little Rock.
California—Division of Labor Statistics and Research, Department of Industrial Relations, San Francisco 3.
Connecticut—Employment Security Division, Department of Labor and Factory Inspection, Hartford 15.
Delaware—Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
Florida—Unemployment Compensation Division, Industrial Commission, Tallahassee.
Georgia—Employment Security Agency, Department of Labor, Atlanta 3.
Idaho—Employment Security Agency, Industrial Accident Board, Boise.
Illinois—Department of Labor, Chicago 1.
Indiana—Employment Security Division, Indianapolis 4.
Iowa—Employment Security Commission, Des Moines 8.
Kansas—State Labor Department, Topeka.
Kentucky—Department of Economic Security, Frankfort.
Louisiana—Division of Employment Security, Department of Labor, Baton Rouge 4.
Maine—Unemployment Compensation Commission, Augusta.
Maryland—Department of Labor and Industry, Baltimore 2.
Massachusetts—Division of Statistics, Department of Labor and Industries, Boston 10.
Michigan—Department of Labor and Industry, Lansing 13.
Minnesota—Division of Employment and Security, Department of Social Security, St. Paul 1.
Missouri—Division of Employment Security, Department of Labor and Industrial Relations, Jefferson City.
Montana—Unemployment Compensation Commission, Helena.
Nebraska—Division of Placement and Unemployment Insurance, Department of Labor, Lincoln 1.
Nevada—Employment Security Department, Carson City.
New Jersey—Department of Labor, Trenton 8.
New Mexico—Employment Security Commission, Albuquerque.
New York—Division of Placement and Unemployment Insurance, Department of Labor, New York 17.
North Carolina—Department of Labor, Raleigh.
Oklahoma—Employment Security Commission, Oklahoma City 2.
Pennsylvania—Federal Reserve Bank of Philadelphia, Philadelphia 1 (manufacturing); Bureau of Research and Information, Department of Labor and Industry, Harrisburg (nonmanufacturing).
Rhode Island—Division of Census and Information, Department of Labor, Providence 2.
Tennessee—Department of Employment Security, Nashville 3.
Texas—Bureau of Business Research, University of Texas, Austin 12.
Utah—Department of Employment Security, Industrial Commission, Salt Lake City 13.
Vermont—Unemployment Compensation Commission, Montpelier.
Virginia—Division of Research and Statistics, Department of Labor and Industry, Richmond 21.
Washington—Employment Security Department, Olympia.
Wisconsin—Statistical Department, Industrial Commission, Madison 3.
Wyoming—Employment Security Commission, Casper.

TABLE A–5: Estimated Number of Production Workers in Manufacturing Industries [1]

[In thousands]

Industry group and industry	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	1939
All manufacturing	13,478	13,233	12,974	12,959	12,738	12,791	13,131	13,066	13,150	13,263	13,176	13,143	13,125	14,560	8,1
Durable goods	6,793	6,700	6,669	6,662	6,642	6,683	6,791	6,711	6,795	6,816	6,746	6,681	6,630	8,727	3,6
Nondurable goods	6,685	6,533	6,305	6,297	6,096	6,108	6,340	6,355	6,355	6,447	6,430	6,462	6,495	5,834	4,5
Durable goods															
Iron and steel and their products	1,649	1,631	1,601	1,610	1,600	1,603	1,634	1,628	1,634	1,633	1,619	1,609	1,604	1,761	991
Blast furnaces, steel works, and rolling mills	.....	534.9	526.5	523.0	517.7	511.8	516.1	508.5	508.8	506.5	505.6	505.1	505.1	516.7	388.
Gray-iron and semisteel castings	.....	106.4	104.7	108.8	107.1	110.7	113.9	114.5	114.4	113.8	113.1	113.1	112.4	88.4	62.
Malleable-iron castings	.....	37.3	36.1	37.9	37.3	37.2	37.9	37.8	37.9	37.6	36.7	36.1	35.6	28.8	19.
Steel castings	.....	69.4	68.2	69.6	68.4	68.6	69.3	68.6	67.7	67.0	66.4	66.2	66.2	90.1	32.
Cast-iron pipe and fittings	.....	29.5	28.9	28.9	28.4	27.6	28.3	28.0	28.7	28.7	28.3	28.1	27.8	18.0	17.
Tin cans and other tinware	.....	49.0	47.3	44.7	42.8	42.1	44.5	45.7	47.4	47.8	47.1	47.0	48.4	32.4	31.
Wire drawn from purchased rods	.....	28.3	28.0	28.7	29.4	30.1	30.6	30.9	31.4	31.6	31.2	31.0	30.5	36.0	22.
Wirework	.....	42.3	41.8	40.2	41.1	41.9	43.4	42.5	43.5	42.4	40.5	40.6	41.1	32.8	30.
Cutlery and edge tools	.....	22.5	21.8	22.1	23.1	23.7	24.0	24.6	24.7	25.0	24.8	24.5	23.9	21.8	15.
Tools (except edge tools, machine tools, files, and saws)	.....	24.5	24.6	25.1	25.2	25.5	25.7	25.8	25.9	25.9	25.4	25.0	24.6	27.8	15.
Hardware	.....	50.1	49.3	49.8	51.9	53.0	54.3	54.1	53.2	52.6	51.1	50.3	49.3	45.3	35.
Plumbers' supplies	.....	40.3	38.8	40.3	39.3	39.4	40.2	40.0	40.0	40.0	39.6	38.7	38.4	25.0	26.
Stoves, oil burners, and heating equipment, not elsewhere classified	.....	84.0	77.6	78.7	79.5	77.8	83.1	86.5	88.5	90.9	91.5	91.1	90.3	60.4	49.
Steam and hot-water heating apparatus and steam fittings	.....	60.4	57.0	60.5	60.8	59.8	62.7	63.2	62.6	62.5	61.8	61.7	61.2	64.4	32.
Stamped and enameled ware and galvanizing	.....	109.0	110.1	111.0	110.9	112.2	114.1	115.1	115.5	117.1	116.4	115.3	114.7	97.0	59.
Fabricated structural and ornamental metalwork	.....	60.9	59.3	59.6	60.0	60.6	60.7	60.2	60.5	60.7	60.5	59.8	60.3	71.0	38.
Metal doors, sash, frames, molding, and trim	.....	10.8	10.4	10.4	10.2	10.1	10.5	10.2	10.8	10.9	10.7	10.5	10.3	12.8	7.
Bolts, nuts, washers, and rivets	.....	27.9	28.1	28.5	28.6	28.9	28.9	28.7	28.7	28.6	28.4	27.8	28.3	31.6	13.
Forgings, iron and steel	.....	35.2	35.1	34.9	35.1	36.7	37.5	37.6	37.8	37.4	36.8	36.7	36.3	43.6	16.
Wrought pipe, welded and heavy-riveted	.....	19.7	19.8	20.1	18.8	18.8	19.2	19.1	19.8	19.6	18.9	18.4	17.8	28.4	8.
Screw-machine products and wood screws	.....	34.8	35.2	35.9	36.4	36.8	36.8	36.6	36.1	35.8	35.5	35.4	35.3	53.8	14.
Steel barrels, kegs, and drums	.....	8.1	7.9	7.9	7.6	7.7	7.9	8.1	8.4	8.2	8.0	8.0	8.2	8.5	6.
Firearms	.....	21.3	21.5	21.4	21.2	21.0	20.8	20.4	20.0	19.7	19.3	19.0	18.5	71.7	5.
Electrical machinery [2]	548	538	535	547	548	563	577	584	588	596	595	588	578	741	259
Electrical equipment	.....	363.9	362.3	367.7	368.3	376.0	382.9	387.7	389.7	393.4	391.4	380.0	384.7	497.5	182.
Radios and phonographs	.....	86.9	85.9	89.0	90.0	93.4	97.6	99.2	100.3	104.8	106.3	104.3	99.6	124.1	44.
Communication equipment	.....	87.5	87.0	90.3	90.0	93.9	96.5	97.2	98.2	98.2	97.5	95.6	93.6	119.3	32.
Machinery, except electrical	1,208	1,193	1,199	1,217	1,207	1,202	1,232	1,237	1,231	1,235	1,218	1,214	1,209	1,293	529
Machinery and machine-shop products	.....	483.8	487.5	493.2	489.6	495.9	500.1	502.8	500.2	498.9	497.3	498.8	498.7	586.0	207.
Engines and turbines	.....	51.4	52.3	52.1	53.5	53.9	54.7	54.4	54.6	54.5	53.0	53.3	53.5	79.5	18.
Tractors	.....	58.8	60.0	60.4	56.3	44.8	62.2	61.9	61.4	60.3	58.6	58.0	57.1	52.4	31.
Agricultural machinery, excluding tractors	.....	72.5	74.8	76.3	75.2	76.2	75.9	74.6	72.3	71.0	68.0	67.5	67.6	45.1	28.
Machine tools	.....	47.8	46.8	47.0	47.5	47.7	49.2	50.4	50.4	51.3	51.1	52.1	52.3	109.7	36.
Machine-tool accessories	.....	55.1	51.8	55.4	55.4	55.5	55.9	56.3	56.4	56.3	55.8	55.6	56.0	105.4	25.
Textile machinery	.....	42.1	41.3	42.0	41.6	41.4	41.1	40.8	40.7	40.6	39.8	39.3	37.3	28.5	21.
Pumps and pumping equipment	.....	65.7	66.3	67.7	69.3	69.9	71.3	73.0	73.1	72.8	72.2	72.3	73.9	92.8	24.
Typewriters	.....	22.1	22.8	23.7	23.8	24.1	24.9	25.1	25.8	25.9	25.2	24.8	24.2	12.0	16.
Cash registers; adding, and calculating machines	.....	44.7	45.2	45.8	45.6	46.3	46.1	45.9	45.3	45.2	44.1	43.0	42.1	34.8	19.
Washing machines, wringers, and driers, domestic	.....	15.6	15.6	16.4	16.0	16.2	16.3	16.5	16.2	16.3	15.8	15.3	14.9	13.3	7.
Sewing machines, domestic and industrial	.....	14.3	14.1	14.0	13.9	13.8	13.7	13.5	13.4	13.3	13.0	12.6	12.1	10.7	7.
Refrigerators and refrigeration equipment	.....	83.1	84.2	84.8	82.5	79.7	81.0	81.6	82.6	81.5	80.1	79.7	79.1	54.4	35.
Transportation equipment, except automobiles	439	415	430	434	438	462	465	464	472	463	452	427	414	2,508	159
Locomotives	.....	17.2	26.4	26.3	26.4	26.6	26.6	26.5	26.3	26.3	26.0	25.9	25.1	34.1	6.
Cars, electric- and steam-railroad	.....	54.6	54.5	55.0	53.9	53.9	54.4	54.0	55.9	56.9	56.8	55.2	55.4	60.5	24.
Aircraft and parts, excluding aircraft engines	.....	133.5	130.3	127.6	125.1	137.3	136.1	135.3	134.7	133.2	133.4	133.9	129.7	794.9	39.
Aircraft engines	.....	21.6	25.6	25.9	25.1	24.8	24.6	24.9	25.3	25.9	25.9	26.2	26.6	233.5	8.
Shipbuilding and boatbuilding	.....	100.3	103.7	108.9	116.1	122.5	125.8	127.7	132.9	125.7	117.6	100.2	93.0	1,225.2	69.
Motorcycles, bicycles, and parts	.....	11.6	10.8	12.4	12.9	14.4	14.8	14.6	14.5	14.7	14.4	14.1	13.9	10.0	7.
Automobiles	777	762	786	739	767	772	784	720	789	785	766	764	767	714	402
Nonferrous metals and their products [2]	399	395	388	399	398	406	413	409	409	413	410	404	400	449	229
Smelting and refining, primary, of nonferrous metals	.....	41.4	41.9	42.0	41.4	41.0	40.8	40.2	39.9	40.0	39.7	39.7	39.8	56.4	27.
Alloying; and rolling and drawing of nonferrous metals, except aluminum	.....	52.6	51.9	52.6	52.6	53.7	54.6	53.1	53.6	53.4	52.9	53.0	53.2	75.8	38.
Clocks and watches	.....	27.5	25.9	28.3	28.3	28.5	28.8	28.6	28.6	28.6	28.4	28.1	27.8	25.2	20.
Jewelry (precious metals) and jewelers' findings	.....	26.3	25.8	26.3	26.4	27.1	27.6	27.5	27.3	27.7	28.1	27.5	26.4	20.5	14.
Silverware and plated ware	.....	27.7	26.5	27.4	27.2	27.5	27.5	27.1	26.8	27.1	26.5	26.1	25.5	15.1	12.

See footnotes at end of table

TABLE A-5: Estimated Number of Production Workers in Manufacturing Industries [1]—Continued

[In thousands]

Industry group and industry	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	1939
Durable goods—Continued															
Nonferrous metals and their products [2]—Con.															
Lighting equipment	-------	31.1	30.2	30.9	30.4	31.3	33.1	33.9	33.6	34.1	34.3	34.9	35.2	28.2	20.5
Aluminum manufactures	-------	39.4	39.1	42.3	42.7	44.2	45.2	45.2	45.3	44.8	43.6	43.1	42.4	79.4	23.5
Sheet-metal work, not elsewhere classified	-------	37.5	37.0	36.4	36.7	37.5	38.3	38.4	38.8	40.9	40.6	40.1	38.7	37.9	18.7
Lumber and timber basic products [3]	843	844	828	799	772	754	749	736	738	750	751	751	745	535	420
Sawmills and logging camps	-------	692.1	681.1	654.5	627.7	611.0	606.9	594.1	597.7	610.7	612.8	616.3	613.3	435.8	313.7
Planing and plywood mills	-------	151.9	147.7	145.8	144.0	142.7	142.3	141.1	140.8	139.4	137.7	134.5	132.0	99.2	79.1
Furniture and finished lumber products [3]	466	461	452	459	458	470	485	490	489	487	483	475	466	366	328
Mattresses and bedsprings	-------	35.2	33.2	33.4	33.3	34.9	37.0	38.6	38.7	38.4	38.2	37.2	35.4	21.7	20.5
Furniture	-------	248.5	244.4	248.1	249.6	256.2	263.7	266.2	265.1	262.9	259.3	253.8	247.7	200.0	177.9
Wooden boxes, other than cigar	-------	35.0	35.6	35.6	34.8	36.0	37.0	37.6	37.8	37.0	37.6	38.3	38.0	35.4	28.3
Caskets and other morticians' goods	-------	19.3	18.9	19.4	19.9	20.3	20.9	20.7	21.0	21.1	20.9	20.7	20.8	14.2	13.9
Wood preserving	-------	17.7	17.3	16.8	16.5	16.2	16.7	16.7	17.6	18.0	18.6	19.0	19.4	12.4	12.6
Wood, turned and shaped	-------	35.0	33.9	35.4	34.3	35.0	35.7	35.1	34.3	34.9	34.5	33.6	33.4	26.4	24.6
Stone, clay, and glass products	464	461	450	458	454	451	452	443	445	454	452	449	447	360	294
Glass and glassware	-------	115.6	111.0	116.5	117.5	117.9	117.8	115.1	117.2	119.7	120.1	120.0	118.9	99.8	71.4
Glass products made from purchased glass	-------	12.1	12.5	12.3	12.2	12.4	12.5	12.4	12.5	12.7	12.6	12.2	12.0	11.3	10.0
Cement	-------	38.0	38.1	37.6	37.1	36.6	36.4	36.6	36.3	36.7	36.8	36.8	37.0	27.1	24.4
Brick, tile, and terra cotta	-------	81.3	79.8	80.1	77.7	76.1	75.5	73.7	76.3	76.3	75.8	75.6	75.4	52.5	58.0
Pottery and related products	-------	58.4	55.6	57.6	57.1	56.6	57.6	56.5	56.1	57.6	57.2	56.1	55.9	45.0	33.8
Gypsum	-------	6.7	6.7	6.6	6.5	6.6	6.6	6.6	6.6	6.6	6.5	6.4	6.1	4.5	4.9
Wallboard, plaster (except gypsum), and mineral wool	-------	12.7	2.7	12.6	12.6	12 6	12.4	12.5	12.6	12.7	12.7	12.3	12.1	11.1	8.1
Lime	-------	9.4	9.4	9.3	9.5	9.6	9.5	9.3	9.3	9.3	9.5	9.1	9.2	9.3	9.5
Marble, granite, slate, and other products	-------	18.8	18.7	18.5	18.1	17.9	18.4	17.9	18.0	18.3	18.5	18.4	18.5	12.5	18.5
Abrasives	-------	18.0	18.3	17.8	17.5	17.5	17.5	17.1	13.8	16.8	16.5	16.5	16.9	23.4	7.7
Asbestos products	-------	21.7	20.9	21.7	21.8	21.9	22.0	21.8	21.9	21.7	21.3	21.3	21.0	22.0	15.9
Nondurable goods															
Textile-mill products and other fiber manufactures	1,261	1,274	1,243	1,295	1,293	1,301	1,312	1,306	1,292	1,290	1,271	1,249	1,223	1,237	1,144
Cotton manufactures, except smallwares	-------	520.3	508.9	527.7	524.7	526.4	529.4	525.3	523.6	523.2	516.9	508.2	498.9	526.3	418.4
Cotton smallwares	-------	13.5	13.4	14.0	14.4	14.6	14.9	14.9	14.6	14.3	13.9	13.7	13.4	17.8	14.1
Silk and rayon goods	-------	112.8	108.2	112.6	111.8	111.7	111.6	110.8	107.4	108.2	106.9	105.7	103.3	104.1	126.6
Woolen and worsted manufactures, except dyeing and finishing	-------	169.4	167.2	173.8	173.2	175.0	178.3	179.5	177.4	177.3	174.2	170.9	168.7	174.1	157.7
Hosiery	-------	133.4	125.6	135.3	136.6	139.2	141.2	140.2	139.1	138.4	136.2	133.4	130.2	125.9	168.0
Knitted cloth	-------	11.2	11.1	11.2	11.5	11.8	11.7	11.7	11.6	11.5	11.5	11.2	11.0	12.6	11.5
Knitted outerwear and knitted gloves	-------	29.4	28.1	30.8	31.4	31.0	31.6	31.5	30.6	31.3	31.4	30.8	29.6	34.8	29.7
Knitted underwear	-------	46.5	46.6	48.1	48.6	50.0	50.3	49.8	49.1	48.8	47.8	46.9	45.6	44.9	40.7
Dyeing and finishing textiles, including woolen and worsted	-------	85.1	84.5	86.5	87.5	88.3	88.5	88.9	87.9	87.5	85.9	85.1	83.0	80.2	70.6
Carpets and rugs, wool	-------	37.2	37.1	37.2	36.9	36.6	36.6	36.2	35.7	35.4	34.4	33.6	32.9	24.5	27.0
Hats, fur-felt	-------	13.3	12.3	13.4	12.9	12.7	13.7	13.7	13.7	13.8	13.6	13.6	13.2	11.0	15.4
Jute goods, except felts	-------	4.3	4.3	4.3	4.2	4.3	4.1	4.2	4.0	3.1	3.0	3.0	2.9	4.2	3.8
Cordage and twine	-------	15.4	15.8	16.2	16.4	16.7	17.1	17.2	16.8	16.5	16.1	15.4	14.7	18.3	12.8
Apparel and other finished textile products	1,176	1,160	1,070	1,095	1,082	1,103	1,165	1,166	1,147	1,143	1,117	1,127	1,096	958	790
Men's clothing, not elsewhere classified	-------	318.2	296.5	314.4	309.8	310.0	314.5	311.3	308.1	310.5	309.2	306.9	299.4	265.9	229.6
Shirts, collars, and nightwear	-------	78.6	75.8	80.0	80.9	82.0	82.2	82.0	81.6	82.4	81.1	79.3	77.2	67.2	74.0
Underwear and neckwear, men's	-------	17.8	16.7	18.2	18.4	18.7	19.0	18.7	18.1	18.4	18.1	17.3	17.1	16.3	17.0
Work shirts	-------	18.6	18.5	18.6	18.2	17.9	17.5	16.8	15.8	15.5	15.5	15.8	15.9	18.5	14.1
Women's clothing, not elsewhere classified	-------	480.7	437.0	435.4	427.6	440.0	481.7	485.3	476.2	470.5	452.1	462.3	452.1	345.3	286.2
Corsets and allied garments	-------	18.2	17.0	18.1	18.5	19.2	19.9	20.1	19.7	19.6	19.4	18.8	18.1	16.5	18.8
Millinery	-------	24.9	22.0	20.0	20.5	23.6	27.6	27.9	26.4	23.5	21.6	25.2	23.8	23.3	25.5
Handkerchiefs	-------	4.8	4.0	4.9	5.0	5.1	5.1	5.0	4.9	5.1	5.2	5.1	5.0	5.7	5.1
Curtains, draperies, and bedspreads	-------	29.2	25.1	26.4	26.4	27.7	30.6	33.8	31.6	32.2	32.1	30.9	28.7	25.2	17.8
Housefurnishings, other than curtains, etc.	-------	30.2	28.1	27.9	27.7	29.0	30.4	29.2	30.0	30.6	30.0	31.6	30.6	24.0	11.2
Textile bags	-------	28.9	28.1	27.1	26.8	26.8	27.3	27.8	28.2	28.6	28.4	28.1	27.8	19.6	12.6
Leather and leather products [3]	379	384	376	373	359	372	396	402	399	400	396	393	390	340	347
Leather	-------	47.7	47.2	47.9	47.5	47.6	49.2	50.3	50.2	50.3	50.2	50.2	49.8	46.5	50.0
Boot and shoe cut stock and findings	-------	18.1	17.7	17.8	17.3	17.7	18.9	19.5	19.7	19.8	19.8	19.6	19.3	19.2	20.0
Boots and shoes	-------	245.7	240.2	236.6	225.5	235.9	254.1	257.8	256.2	255.4	251.1	248.8	247.6	205.6	230.9
Leather gloves and mittens	-------	13.2	12.8	12.9	12.4	12.2	12.5	12.5	12.2	13.0	13.2	13.1	12.8	15.4	10.0
Trunks and suitcases	-------	13.8	13.3	13.3	13.2	13.3	13.9	14.0	13.3	14.2	14.8	14.4	13.5	13.7	8.3
Food	1,537	1,414	1,362	1,257	1,091	1,047	1,149	1,159	1,191	1,255	1,288	1,353	1,483	1,056	855
Slaughtering and meat packing	-------	183.1	187.5	186.1	116.2	97.1	180.9	187.0	196.7	203.7	191.7	183.0	182.0	174.0	135.0
Butter	-------	37.9	39.3	40.5	39.2	36.9	34.3	32.0	32.6	32.9	33.9	34.8	35.8	33.2	20.1
Condensed and evaporated milk	-------	21.7	22.4	23.0	21.6	20.5	19.3	18.8	18.4	18.6	19.5	20.5	21.2	19.9	10.9
Ice cream	-------	31.6	32.6	31.6	29.2	27.1	24.4	23.6	23.6	24.9	26.3	27.8	31.1	23.0	17.6
Flour	-------	39.4	39.8	38.6	37.3	37.5	37.8	38.2	39.2	39.4	39.7	39.8	39.6	32.9	27.8
Feeds, prepared	-------	29.3	29.1	28.7	27.9	26.6	26.3	27.4	29.3	29.1	28.5	28.9	29.6	25.0	17.3

See footnotes at end of table.

TABLE A-5: Estimated Number of Production Workers in Manufacturing Industries [1]—Continued

[In thousands]

Industry group and industry	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	1939
Nondurable goods—Continued															
Food—Continued															
Cereal preparations		13.7	13.8	13.0	12.8	12.2	12.1	12.4	12.1	12.1	12.8	12.8	14.0	11.4	8.6
Baking		227.0	226.3	224.6	219.7	217.5	219.7	217.2	215.4	220.8	224.8	224.5	219.8	211.3	190.6
Sugar refining, cane		20.9	21.4	18.3	17.7	17.3	19.6	20.2	18.4	20.0	20.8	20.5	20.8	16.7	18.0
Sugar, beet		8.5	7.2	7.0	6.3	5.4	5.6	6.5	10.6	20.9	26.2	26.3	11.9	10.1	11.6
Confectionery		63.7	56.0	57.8	56.0	61.0	65.9	70.3	74.7	78.7	79.5	76.4	68.3	59.5	55.7
Beverages, nonalcoholic		43.9	44.6	41.0	38.5	36.1	34.2	32.1	33.4	33.3	34.3	35.8	39.3	32.2	23.6
Malt liquors		78.9	79.3	74.8	66.3	69.8	67.6	66.9	68.0	69.7	73.3	74.7	76.2	54.3	40.6
Canning and preserving		292.5	246.2	167.9	137.8	126.7	122.1	123.4	128.5	148.9	172.0	240.1	384.3	188.5	150.0
Tobacco manufactures [2]	88	86	83	85	84	86	87	88	87	88	90	89	86	91	92
Cigarettes		34.5	33.6	33.3	33.1	33.2	33.2	33.5	33.6	34.2	34.0	33.4	32.6	33.9	27.4
Cigars		44.1	41.7	43.6	43.7	45.2	46.2	46.2	45.8	45.6	47.8	47.0	45.5	47.5	53.8
Tobacco (chewing and smoking) and snuff		7.8	7.6	7.7	7.6	7.7	7.8	7.9	7.9	8.3	8.2	8.2	8.0	9.3	10.1
Paper and allied products [2]	395	391	388	390	389	389	393	392	395	398	394	392	388	324	265
Paper and pulp		206.7	205.8	204.2	204.7	203.7	203.8	203.0	203.0	202.8	200.7	200.2	200.0	160.3	127.8
Paper goods, other		58.7	60.5	61.7	61.5	61.4	62.0	61.9	62.6	63.8	63.3	63.0	61.4	50.2	37.7
Envelopes		12.4	12.3	12.5	12.7	12.7	12.7	12.5	12.4	12.4	12.4	12.2	12.0	10.2	8.7
Paper bags		17.7	17.4	17.5	17.6	18.0	18.2	18.0	18.1	18.2	17.9	17.9	17.7	13.1	11.1
Paper boxes		94.8	90.9	92.8	91.4	92.7	95.2	96.5	97.7	99.6	99.0	98.1	96.0	89.6	69.2
Printing, publishing, and allied industries [2]	436	432	430	433	432	432	435	438	439	445	444	441	437	331	328
Newspapers and periodicals		147.7	146.8	146.9	146.4	145.0	144.8	144.1	143.6	145.6	145.1	144.6	144.4	113.0	118.7
Printing; book and job		183.1	183.0	184.4	184.2	183.2	185.4	187.7	189.7	191.4	190.6	189.3	185.9	138.7	127.6
Lithographing		31.2	31.2	31.1	30.9	31.3	31.4	31.8	32.0	32.9	33.0	32.6	32.4	25.9	26.0
Bookbinding		34.5	33.4	35.1	35.1	35.9	37.2	37.4	37.6	38.3	38.7	38.5	38.2	29.4	25.8
Chemicals and allied products [2]	597	586	567	574	572	580	587	588	588	592	589	586	576	734	288
Paints, varnishes, and colors		49.7	49.1	49.1	48.7	48.0	48.6	49.3	48.6	48.4	48.0	47.6	47.3	38.2	28.0
Drugs, medicines, and insecticides		63.9	63.4	63.6	63.6	64.2	65.2	65.6	65.7	65.9	66.4	67.1	67.1	56.0	27.8
Perfumes and cosmetics		12.4	10.9	10.9	11.0	11.2	11.6	12.1	12.0	12.9	13.9	13.5	12.6	14.1	10.4
Soap		25.2	24.0	23.7	21.7	21.8	24.9	25.4	25.5	25.5	25.8	25.3	24.7	17.9	18.1
Rayon and allied products		64.9	64.4	64.3	63.4	63.5	63.7	63.7	63.2	63.5	63.1	62.9	62.1	54.0	48.0
Chemicals, not elsewhere classified		211.2	202.0	207.6	204.8	207.2	205.4	205.5	206.7	207.0	205.5	204.3	204.3	144.5	69.9
Explosives and safety fuses		27.8	27.4	26.7	25.7	25.6	25.8	25.5	25.3	25.3	24.8	24.1	23.7	112.0	7.0
Compressed and liquefied gases		10.1	10.0	10.1	10.0	10.0	9.9	9.8	9.9	9.9	9.7	9.7	9.9	7.8	4.0
Ammunition, small-arms		7.5	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.4	7.2	7.2	7.0	154.1	4.0
Fireworks		2.8	2.2	2.5	2.6	2.4	2.4	2.6	2.5	2.8	2.9	2.9	2.5	28.2	1.2
Cottonseed oil		14.3	12.5	12.7	13.6	15.2	17.6	19.5	21.7	24.1	24.5	24.0	18.3	20.4	15.8
Fertilizers		26.9	25.5	27.2	32.3	36.7	38.1	35.4	33.3	36.7	29.2	29.3	29.3	27.5	18.8
Products of petroleum and coal [2]	168	170	170	170	167	164	165	163	164	165	165	165	166	125	106
Petroleum refining		115.9	117.0	116.6	114.7	113.6	113.5	112.1	112.4	112.5	112.3	112.4	113.4	83.1	73.2
Coke and byproducts		32.2	31.8	31.7	31.1	29.7	30.7	30.3	30.5	30.0	30.0	29.6	29.3	25.5	21.7
Paving materials		2.7	2.6	2.6	2.4	2.3	1.8	1.8	2.0	2.7	3.4	3.4	3.4	2.1	2.5
Roofing materials		17.8	17.4	17.7	17.3	17.4	17.4	17.6	18.0	18.3	18.5	18.4	18.4	13.1	8.1
Rubber products [2]	197	195	191	195	195	198	204	208	210	212	210	208	203	194	121
Rubber tires and inner tubes		91.5	90.9	91.9	91.4	92.6	96.4	98.9	100.6	101.9	102.4	102.0	100.5	90.1	54.2
Rubber boots and shoes		22.0	20.7	21.8	21.7	22.1	22.6	22.8	22.5	22.5	22.0	21.7	21.0	23.8	14.8
Rubber goods, other		81.0	79.2	81.7	81.7	84.0	85.7	86.5	86.8	87.7	86.1	84.0	81.9	79.9	51.9
Miscellaneous industries [2]	451	441	425	430	432	436	447	445	443	459	466	459	447	445	244
Instruments (professional and scientific), and fire-control equipment		28.1	28.0	27.7	27.5	27.6	27.7	27.7	27.7	28.1	27.8	28.0	27.7	86.7	11.3
Photographic apparatus		39.7	39.0	38.3	37.8	38.4	38.8	39.0	38.9	39.2	38.8	38.7	38.2	35.5	17.7
Optical instruments and ophthalmic goods		24.8	23.9	25.6	26.7	27.0	27.2	27.4	27.8	28.0	27.6	27.5	27.5	33.3	11.0
Pianos, organs, and parts		13.8	12.8	13.5	13.7	13.3	14.8	15.7	16.8	17.6	17.8	17.4	16.5	12.2	7.8
Games, toys, and dolls		44.8	41.9	41.1	40.2	40.3	38.5	36.3	33.5	38.5	43.4	42.3	40.9	19.1	19.1
Buttons		13.0	12.5	12.9	12.8	13.1	13.8	13.4	13.3	13.4	12.7	12.1	11.6	13.1	11.2
Fire extinguishers		2.7	2.8	2.8	2.7	2.7	2.6	2.5	2.6	2.7	2.7	2.8	2.8	9.3	1.0

[1] Data are based upon reports from cooperating establishments covering both full- and part-time production and related workers who worked or received pay during the pay period ending nearest the 15th of the month. Major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data shown for the two most recent months are subject to revision without notation. Revised figures in any column other than the first three are identified by an asterisk for the first month's publication of such data.

[2] Estimates for the individual industries comprising the major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Comparable data from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

More recently adjusted data for the individual industries comprising the major industry groups listed below supersede data shown in publications dated prior to:

Major industry group	*Mimeographed release*	*Monthly Labor Review*
Lumber and timber basic products	Sept. 1948	Oct. 1948
Leather and leather products	Sept. 1948	Oct. 1948
Paper and allied products	Sept. 1948	Oct. 1948
Printing, publishing, and allied industries	Sept. 1948	Oct. 1948
Products of petroleum and coal	Sept. 1948	Oct. 1948
Rubber products	Sept. 1948	Oct. 1948
Electrical machinery	Oct. 1948	Nov. 1948
Nonferrous metals and their products	Oct. 1948	Nov. 1948
Furniture and finished lumber products	Oct. 1948	Nov. 1948
Chemicals and allied products	Oct. 1948	Nov. 1948
Miscellaneous industries	Oct. 1948	Nov. 1948

TABLE A–6: Indexes of Production-Worker Employment in Manufacturing Industries [1]

[1939 average = 100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
manufacturing	164.5	161.5	158.4	158.2	155.5	156.1	160.3	159.5	160.5	161.9	160.8	160.4	160.2	177.7
Durable goods	188.1	185.5	184.7	184.5	183.9	185.1	188.1	185.8	188.2	188.8	186.8	185.0	183.6	241.7
Nondurable goods	145.9	142.6	137.6	137.5	133.1	133.3	138.4	138.7	138.7	140.7	140.4	141.1	141.8	127.4
Durable goods														
n and steel and their products	166.3	164.5	161.4	162.4	161.4	161.7	164.8	164.2	164.9	164.7	163.3	162.3	161.7	177.6
Blast furnaces, steel works, and rolling mills		137.7	135.5	134.6	133.3	131.8	132.9	130.9	131.0	130.4	130.2	130.0	130.0	133.0
Gray-iron and semisteel castings		171.0	168.3	174.8	172.2	177.9	183.0	184.0	183.9	183.0	181.8	181.7	180.6	142.1
Malleable-iron castings		194.3	188.0	197.0	194.2	193.6	197.0	196.7	197.2	195.5	191.1	187.7	185.1	149.6
Steel castings		216.4	212.6	217.1	213.6	214.1	216.3	214.2	211.3	208.9	207.3	206.7	206.7	281.1
Cast-iron pipe and fittings		167.5	164.5	164.5	161.6	157.0	160.8	159.1	162.9	163.4	160.6	159.5	157.8	102.5
Tin cans and other tinware		154.1	148.8	140.8	134.9	132.4	140.0	143.8	149.1	150.3	148.3	148.0	152.3	102.0
Wire drawn from purchased rods		128.9	127.5	130.7	134.0	137.1	139.4	140.5	142.7	143.7	141.8	141.0	138.8	163.8
Wirework		139.3	137.6	132.4	135.2	137.9	142.9	139.9	143.0	139.4	133.2	133.6	135.3	108.0
Cutlery and edge tools		145.8	141.2	143.6	149.9	153.8	155.9	159.4	160.3	162.2	161.0	158.9	154.7	141.3
Tools, (except edge tools, machine tools, files, and saws)		160.3	160.8	163.9	164.7	166.7	167.9	168.8	169.2	169.5	166.1	163.0	160.9	181.5
Hardware		140.6	138.3	139.7	145.5	148.6	152.5	151.7	149.4	147.5	143.4	141.1	138.4	127.1
Plumbers' supplies		153.7	147.8	153.7	149.8	150.3	153.2	152.6	152.5	152.5	150.9	147.4	146.2	95.3
Stoves, oil burners, and heating equipment, not elsewhere classified		170.8	157.9	160.2	161.7	158.2	169.1	175.9	180.0	184.9	186.2	185.2	183.7	122.9
Steam and hot-water heating apparatus and steam fittings		187.1	176.4	187.4	188.2	185.2	194.2	195.7	194.0	193.7	191.3	191.2	189.7	199.4
Stamped and enameled ware and galvanizing		184.2	186.1	187.6	187.4	189.6	192.8	194.6	195.2	198.0	196.8	194.9	193.9	163.9
Fabricated structural and ornamental metal work		171.6	167.1	167.9	169.0	170.7	170.9	169.4	170.3	171.0	170.2	168.4	169.7	200.0
Metal doors, sash, frames, molding, and trim		139.5	134.2	133.7	131.4	130.6	135.4	131.2	139.3	141.0	138.3	135.8	132.8	164.9
Bolts, nuts, washers, and rivets		182.8	184.5	187.3	187.8	189.8	190.0	188.2	188.4	187.4	186.5	182.3	185.6	207.4
Forgings, iron and steel		215.2	214.5	213.3	214.2	223.9	228.8	229.5	231.0	228.3	225.0	223.8	221.6	266.3
Wrought pipe, welded and heavy-riveted		220.7	222.1	225.1	211.0	210.8	215.5	214.6	222.5	219.7	212.5	206.6	200.0	318.5
Screw-machine products and wood screws		193.0	195.3	199.1	202.1	204.4	203.9	203.2	200.1	198.7	196.8	196.4	195.9	298.5
Steel barrels, kegs, and drums		125.6	122.4	121.7	117.7	119.5	121.9	125.5	130.3	126.4	123.5	123.8	127.3	131.8
Firearms		400.3	403.0	402.6	397.9	395.1	390.0	383.9	375.4	369.8	361.6	357.4	347.6	1346.4
lectrical machinery [3]	211.5	207.7	206.6	211.1	211.6	217.4	222.9	225.4	227.0	230.2	229.7	226.9	223.0	285.9
Electrical equipment		199.2	198.3	201.3	201.6	205.8	209.6	212.3	213.3	215.4	214.3	212.4	210.6	272.4
Radios and phonographs		197.6	195.3	202.3	204.6	212.2	221.9	225.5	228.0	238.2	241.7	237.0	226.3	282.0
Communication equipment		269.5	268.1	278.2	277.3	289.3	297.4	299.3	302.4	302.7	309.3	294.6	288.3	367.5
Machinery, except electrical	228.7	225.8	226.9	230.4	228.5	227.4	233.1	234.0	233.0	233.8	230.5	229.7	228.8	244.7
Machinery and machine-shop products		233.0	234.8	237.5	235.8	238.8	240.9	242.2	240.9	240.3	239.5	240.2	240.2	282.2
Engines and turbines		275.8	280.6	279.5	286.7	289.1	293.3	291.6	292.9	292.4	283.9	285.8	286.6	426.4
Tractors		188.1	191.8	193.0	180.1	143.4	198.8	197.9	196.4	192.8	187.5	185.3	182.5	167.5
Agricultural machinery, excluding tractors		254.0	262.2	267.4	263.7	267.0	266.1	261.6	253.5	248.8	238.4	236.6	236.9	158.1
Machine tools		130.5	127.7	128.4	129.7	130.4	134.5	137.6	137.6	140.2	139.5	142.4	142.9	299.5
Machine-tool accessories		213.2	200.4	214.5	214.4	214.8	216.6	218.0	218.6	218.1	216.2	215.3	216.8	408.1
Textile machinery		192.1	188.6	191.6	189.8	189.2	187.6	186.2	185.8	185.3	181.9	179.3	170.5	130.1
Pumps and pumping equipment		264.1	266.5	272.3	278.7	280.9	286.8	293.5	293.9	292.7	290.3	290.5	297.3	372.9
Typewriters		136.3	140.8	145.9	147.0	148.7	153.5	154.9	158.8	159.5	155.5	152.7	149.4	73.8
Cash registers; adding and calculating machines		227.4	229.5	232.9	231.8	235.2	234.2	233.4	230.2	229.4	224.1	218.5	213.9	177.0
Washing machines, wringers, and driers, domestic		208.3	209.5	220.0	214.6	217.0	218.4	221.1	216.8	218.1	211.2	205.1	200.1	178.8
Sewing machines, domestic and industrial		183.0	179.4	178.6	177.2	175.9	174.8	172.5	171.0	170.1	165.7	160.2	154.6	136.6
Refrigerators and refrigeration equipment		236.3	239.5	241.3	234.6	226.7	230.4	232.2	234.9	231.8	227.7	226.6	225.0	154.9
Transportation equipment, except automobiles	276.3	261.4	270.6	273.7	276.0	290.9	292.7	292.6	297.3	291.6	284.6	269.2	260.7	1580.1
Locomotives		265.6	407.4	406.5	407.7	410.5	411.3	409.1	406.7	406.2	402.0	400.5	388.1	526.8
Cars, electric- and steam-railroad		222.8	222.3	224.4	219.6	219.7	221.8	220.2	228.0	231.8	231.4	225.2	225.7	246.5
Aircraft and parts, excluding aircraft engines		336.4	328.5	321.5	315.3	346.0	342.9	341.1	339.5	335.8	336.2	337.4	327.0	2003.5
Aircraft engines		243.2	287.4	290.8	282.4	278.4	276.9	280.1	284.0	291.0	291.0	294.8	299.2	2625.7
Shipbuilding and boatbuilding		144.8	149.8	157.2	167.6	176.8	181.6	184.4	191.9	181.5	169.9	144.7	134.3	1769.4
Motorcycles, bicycles, and parts		166.1	154.7	177.5	185.2	206.0	211.7	209.4	207.6	210.1	207.0	201.8	200.0	143.7
Automobiles	193.0	189.4	195.4	183.6	190.5	191.9	195.0	178.9	196.0	195.2	190.4	190.0	190.5	177.5
Nonferrous metals and their products [3]	173.9	172.4	169.2	173.9	173.7	176.9	180.0	178.5	178.4	180.3	178.8	176.3	174.7	196.0
Smelting and refining, primary, of nonferrous metals		150.0	151.7	151.8	149.8	148.4	147.8	145.4	144.5	144.6	143.7	143.9	144.0	204.3
Alloying; and rolling and drawing of nonferrous metals, except aluminum		135.5	133.7	135.5	135.6	138.3	140.6	136.9	138.2	137.5	136.3	136.6	136.9	195.2
Clocks and watches		125.3	127.8	139.5	139.2	140.7	141.9	141.1	140.8	140.8	139.9	138.6	137.0	124.2
Jewelry (precious metals) and jewelers' findings		182.3	178.4	182.1	182.6	187.6	191.0	190.4	189.3	191.6	194.6	190.2	182.9	141.8
Silverware and plated ware		228.0	218.3	225.5	224.2	226.8	226.5	223.1	221.0	223.5	218.8	215.3	210.2	124.5
Lighting equipment		152.0	147.6	150.8	148.4	152.7	161.7	165.4	164.1	166.6	167.3	170.2	171.7	137.8
Aluminum manufactures		167.2	166.0	179.5	181.5	187.7	192.1	192.0	192.2	190.1	185.4	183.0	179.9	337.4
Sheet-metal work, not elsewhere classified		200.2	197.2	193.9	195.5	199.9	204.4	204.9	207.0	218.3	216.8	214.0	206.3	201.9
Lumber and timber basic products [3]	200.6	200.8	196.9	190.0	183.6	179.4	178.3	175.0	175.6	178.4	178.5	178.6	177.3	127.3
Sawmills and logging camps		220.7	217.2	208.7	200.1	194.8	193.5	189.4	190.6	194.7	195.4	196.5	195.5	139.0
Planing and plywood mills		192.0	186.6	184.2	182.0	180.4	179.9	178.4	178.0	176.2	174.1	170.0	166.9	125.4

See footnotes 1 and 2, table A–5.

TABLE A–6: Indexes of Production-Worker Employment in Manufacturing Industries [1]—Continued

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Durable goods—Continued														
Furniture and finished lumber products [2]	142.0	140.5	137.8	139.8	139.7	143.4	147.8	149.2	149.1	148.3	147.1	144.8	141.9	111.2
Mattresses and bedsprings		171.7	161.9	163.0	162.6	170.4	180.3	188.5	188.8	187.3	186.2	181.2	172.5	105.6
Furniture		139.7	137.4	139.4	140.3	144.0	148.2	149.6	149.0	147.8	145.7	142.7	139.2	112.6
Wooden boxes, other than cigar		123.6	125.6	125.6	122.8	127.2	130.5	132.6	133.6	130.7	132.7	135.2	134.2	125.0
Caskets and other morticians' goods		139.0	135.6	139.7	142.8	145.8	150.2	148.9	150.7	151.5	150.6	148.6	149.5	102.4
Wood preserving		140.7	137.7	133.6	131.1	128.7	132.7	133.1	139.8	143.6	147.8	151.5	154.2	98.5
Wood, turned and shaped		142.5	137.8	144.0	139.5	142.6	145.5	142.7	139.8	142.1	140.6	136.7	136.0	107.4
Stone, clay, and glass products	158.1	157.0	153.2	156.0	154.7	153.7	153.9	150.9	151.6	154.7	154.0	152.8	152.3	122.8
Glass and glassware		162.1	155.6	163.2	164.7	165.2	165.2	161.3	164.3	167.8	168.4	168.2	166.7	139.8
Glass products made from purchased glass		120.4	124.4	123.2	122.2	123.4	124.8	123.8	125.0	127.1	125.8	122.0	120.1	113.7
Cement		156.1	156.4	154.5	152.2	150.5	149.4	150.3	149.1	150.5	151.0	151.1	152.1	111.8
Brick, tile, and terra cotta		140.1	137.5	138.0	133.8	131.1	130.1	126.9	131.4	131.4	130.6	130.2	129.8	90.0
Pottery and related products		172.7	164.4	170.2	168.9	167.2	170.2	166.9	166.0	170.3	169.0	166.0	165.2	122.8
Gypsum		135.8	136.4	134.0	132.5	132.8	134.3	133.8	132.7	134.6	132.4	128.7	124.2	91.2
Wallboard, plaster (except gypsum), and mineral wool		156.8	156.7	154.9	155.4	155.2	153.1	154.1	155.7	156.9	156.4	151.2	149.4	127.5
Lime		99.1	99.4	98.3	100.8	101.6	100.0	98.0	97.8	98.6	99.9	95.8	97.0	96.3
Marble, granite, slate, and other products		101.7	101.0	99.6	97.8	96.6	99.3	96.5	97.5	99.0	100.1	99.2	99.9	67.4
Abrasives		232.5	237.2	230.4	226.0	226.3	226.4	221.0	178.0	217.6	213.7	213.8	217.9	302.2
Asbestos products		136.9	131.6	136.7	137.1	137.5	138.2	137.4	137.8	136.3	134.1	134.4	132.0	138.2
Nondurable goods														
Textile-mill products and other fiber manufactures	110.3	111.4	108.7	113.2	113.0	113.7	114.7	114.2	113.0	112.7	111.1	109.2	106.9	108.2
Cotton manufactures, except smallwares		124.4	121.6	126.1	125.4	125.8	126.6	125.6	125.2	125.1	123.6	121.5	119.3	125.6
Cotton smallwares		95.9	95.1	99.4	102.3	103.6	105.8	105.8	103.8	101.8	98.6	97.2	95.2	126.6
Silk and rayon goods		89.1	85.4	89.0	88.3	88.2	88.1	87.6	84.9	85.5	84.4	83.5	81.6	82.2
Woolen and worsted manufactures, except dyeing and finishing		107.4	106.0	110.3	109.9	111.0	113.1	113.9	112.5	112.4	110.5	108.4	107.0	110.6
Hosiery		79.4	74.8	80.5	81.3	82.8	84.1	83.5	82.8	82.3	81.1	79.4	77.5	74.9
Knitted cloth		97.0	96.5	96.8	99.4	101.9	101.4	101.8	100.4	99.9	99.4	97.1	95.2	109.4
Knitted outerwear and knitted gloves		98.9	94.6	103.6	105.8	104.4	106.4	106.0	102.9	105.5	105.5	103.5	99.5	117.2
Knitted underwear		114.2	114.4	118.1	119.3	122.7	123.5	122.2	120.6	120.0	117.5	115.3	111.9	110.4
Dyeing and finishing textiles, including woolen and worsted		120.5	119.6	122.5	123.9	125.0	125.2	125.8	124.4	123.8	121.6	120.5	117.6	113.6
Carpets and rugs, wool		137.5	137.4	137.6	136.4	135.4	135.5	134.0	132.2	130.9	127.1	124.4	121.7	90.8
Hats, fur-felt		86.4	80.0	87.0	84.2	82.7	89.3	89.0	89.1	89.7	88.5	88.4	85.8	71.3
Jute goods, except felts		114.0	112.3	114.2	112.0	112.8	109.3	110.3	105.1	80.6	79.4	79.5	76.6	110.6
Cordage and twine		120.4	123.7	127.0	128.7	130.9	134.1	134.7	131.6	128.8	125.7	120.4	115.3	143.4
Apparel and other finished textile products	149.0	146.9	135.6	138.6	137.1	139.8	147.5	147.7	145.3	144.8	141.5	142.7	138.9	121.4
Men's clothing, not elsewhere classified		138.6	129.1	126.9	134.9	135.0	137.0	135.5	134.2	135.2	134.7	133.6	130.4	115.8
Shirts, collars, and nightwear		106.3	102.5	108.2	109.4	110.9	111.2	110.8	110.4	111.4	109.7	107.2	104.4	90.9
Underwear and neckwear, men's		105.1	98.5	107.4	108.3	110.1	112.0	110.3	106.6	108.8	106.5	102.3	101.1	96.3
Work shirts		131.4	131.3	131.8	129.2	126.4	123.8	119.0	112.0	109.8	109.4	112.1	112.4	131.3
Women's clothing, not elsewhere classified		167.9	152.7	152.1	149.4	153.7	168.3	169.5	166.4	164.4	158.0	161.5	158.0	120.6
Corsets and allied garments		97.1	90.8	96.5	98.8	102.4	106.1	107.0	104.9	104.4	103.3	100.2	96.5	88.1
Millinery		97.6	86.4	78.2	80.4	92.3	108.3	109.2	103.4	92.0	84.7	98.9	93.4	91.5
Handkerchiefs		93.6	77.7	96.6	99.2	99.8	99.6	97.9	95.7	101.1	102.2	100.9	98.3	113.1
Curtains, draperies, and bedspreads		164.4	141.6	148.5	148.8	156.0	172.1	190.5	178.0	181.3	180.9	173.7	161.4	141.9
Housefurnishings, other than curtains, etc		270.9	251.4	249.9	248.2	259.8	272.0	261.5	268.6	274.3	268.7	283.4	274.0	214.9
Textile bags		229.2	222.9	214.8	212.8	212.4	216.9	220.2	223.7	226.8	225.3	222.6	220.1	185.7
Leather and leather products [3]	109.3	110.7	108.3	107.4	103.3	107.1	114.1	115.8	114.9	115.3	114.1	113.2	112.2	98.1
Leather		95.3	94.3	95.7	94.9	95.1	98.4	100.4	100.3	100.4	100.3	100.2	99.6	92.9
Boot and shoe cut stock and findings		90.7	88.6	88.9	86.9	88.7	94.7	97.8	98.8	99.4	99.0	98.1	96.9	96.0
Boots and shoes		106.4	104.0	102.5	97.7	102.2	110.1	111.7	111.0	110.6	108.7	107.8	107.2	89.0
Leather gloves and mittens		132.1	127.8	128.8	123.9	121.9	125.4	124.9	121.9	130.1	131.8	131.5	128.1	153.7
Trunks and suitcases		166.0	159.6	159.3	158.6	160.1	166.4	168.6	159.3	170.1	177.9	172.5	162.6	161.2
Food	179.9	165.5	159.4	147.1	127.7	122.6	134.5	135.6	139.3	146.9	150.7	158.3	173.6	123.5
Slaughtering and meat packing		135.6	138.8	137.8	86.0	71.9	134.0	138.5	145.7	150.8	142.0	135.5	134.7	128.9
Butter		188.2	195.4	201.2	194.5	183.3	170.5	158.8	162.0	163.6	168.2	172.9	178.0	165.1
Condensed and evaporated milk		199.8	205.9	211.2	198.3	188.3	177.2	172.5	169.3	170.6	179.7	188.9	194.5	182.6
Ice cream		179.2	184.9	179.1	166.0	153.9	138.5	133.8	133.7	141.4	149.1	157.8	176.8	130.7
Flour		141.8	143.4	139.1	134.2	135.0	136.0	137.5	141.3	141.9	143.1	143.3	140.4	118.5
Feeds, prepared		169.4	168.5	166.5	161.5	153.9	152.0	158.7	169.4	168.4	165.3	167.7	171.2	145.0
Cereal preparations		164.3	164.5	155.2	152.6	146.4	144.7	147.8	145.0	144.3	153.7	153.6	168.0	136.0
Baking		119.2	118.9	118.0	115.4	114.3	115.4	114.1	113.1	116.0	118.1	117.9	115.5	111.0
Sugar refining, cane		131.7	134.6	115.4	111.7	109.2	123.2	127.2	116.2	126.2	131.1	129.0	131.3	105.1
Sugar, beet		73.3	62.0	60.2	54.6	46.9	48.4	56.3	91.5	179.7	225.5	226.4	102.9	86.5
Confectionery		114.4	100.5	103.7	100.5	109.5	118.3	126.2	134.1	141.2	142.7	137.2	122.6	106.7
Beverages, nonalcoholic		184.2	187.0	172.2	161.7	151.3	143.6	134.9	140.1	139.7	143.8	150.4	164.9	135.1
Malt liquors		195.0	196.1	185.0	163.9	172.4	167.0	165.5	168.2	172.4	181.3	184.6	188.4	134.1
Canning and preserving		194.6	163.8	111.7	91.7	84.3	81.2	82.1	85.5	99.1	114.4	159.8	255.7	125.4
Tobacco manufactures [3]	93.9	92.5	88.8	90.6	90.5	92.4	93.4	93.9	93.6	94.4	96.5	95.1	92.3	97.2
Cigarettes		125.8	122.4	121.2	120.7	121.1	121.1	122.1	122.6	124.5	124.0	121.7	118.7	123.8
Cigars		78.9	74.7	78.1	78.3	81.0	82.7	82.8	82.1	81.7	85.5	84.2	81.5	85.0
Tobacco (chewing and smoking) and snuff		77.2	75.6	76.1	75.9	77.0	77.3	78.3	78.9	82.1	81.3	81.8	79.8	92.5

See footnotes 1 and 2, table A–5.

TABLE A-6: Indexes of Production-Worker Employment in Manufacturing Industries [1]—Continued

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Nondurable goods—Continued														
Paper and allied products [2]	148.7	147.4	146.1	146.9	146.5	146.8	148.0	147.8	148.7	149.9	148.6	147.8	146.2	122.2
Paper and pulp	-------	150.0	149.4	148.2	148.5	147.8	147.9	147.3	147.4	147.2	145.7	145.3	145.2	116.3
Paper goods, other	-------	155.5	160.2	163.6	163.0	162.6	164.2	164.1	165.9	169.1	167.9	166.9	162.9	133.1
Envelopes	-------	141.9	140.9	144.0	145.8	145.6	145.7	143.9	142.0	142.6	142.5	140.6	137.4	116.9
Paper bags	-------	159.2	156.3	157.8	158.5	162.3	164.1	162.0	163.2	163.9	161.3	160.7	159.2	118.0
Paper boxes	-------	136.7	131.0	133.9	131.8	133.7	137.3	139.1	140.8	143.7	142.7	141.5	138.5	129.3
Printing, publishing, and allied industries [3]	133.0	131.8	131.1	132.3	132.0	131.8	132.8	133.5	134.0	135.7	135.4	134.6	133.2	100.8
Newspapers and periodicals	-------	124.4	123.7	123.8	123.3	122.2	122.0	121.4	121.0	122.7	122.2	121.8	121.7	95.2
Printing; book and job	-------	143.5	143.4	144.5	144.3	143.5	145.3	147.1	148.6	150.0	149.3	148.3	145.7	108.7
Lithographing	-------	119.0	118.9	118.3	117.6	119.0	119.5	121.2	121.7	125.3	125.8	124.2	123.4	98.5
Bookbinding	-------	134.0	129.5	136.3	136.2	139.2	144.5	145.1	145.9	148.8	150.3	149.3	148.1	114.1
Chemicals and allied products [3]	207.1	203.3	196.6	199.2	198.4	201.4	203.6	204.2	204.1	205.4	204.5	203.2	199.9	254.5
Paints, varnishes, and colors	-------	175.7	173.6	173.6	172.1	169.8	171.9	174.5	171.8	171.3	169.9	168.5	167.2	135.1
Drugs, medicines, and insecticides	-------	232.1	230.2	231.1	231.1	233.3	236.9	238.3	238.5	239.2	241.3	243.7	243.6	203.6
Perfumes and cosmetics	-------	118.9	104.8	105.0	105.2	107.6	111.2	116.2	115.4	123.6	133.1	129.9	121.3	135 8
Soap	-------	165.3	157.6	155.4	142.2	142.9	163.1	166.3	167.0	167.4	168.9	165.7	161.7	117.1
Rayon and allied products	-------	134.3	133.2	133.0	131.2	131.4	131.8	131.8	130.8	131.4	130.5	130.1	128.4	111.7
Chemicals, not elsewhere classified	-------	302.1	288.9	296.9	292.9	296.3	293.8	293.9	295.6	296.1	294.0	292.2	292.3	206.7
Explosives and safety fuses	-------	380.7	376.1	365.7	351.9	350.7	354.1	349.9	347.5	346.7	339.7	331.1	324.8	1536.9
Compressed and liquefied gases	-------	253.1	252.1	254.2	250.9	252.4	250.1	246.2	249.9	248.8	244.9	243.5	249.0	197.3
Ammunition, small-arms	-------	173.9	180.2	181.5	181.6	182.5	182.8	182.2	178.7	172.7	168.7	167.2	163.5	3595.4
Fireworks	-------	238.0	190.2	212.2	219.7	210.1	203.9	221.8	213.4	243.5	249.0	249.9	214.0	2426.5
Cottonseed oil	-------	93.8	82.0	83.0	89.1	99.5	115.0	127.7	142.1	159.5	160.5	157.2	119.8	133.4
Fertilizers	-------	142.7	135.6	144.4	171.4	194.7	202.3	188.1	176.9	163.1	155.1	155.7	155.5	146.2
Products of petroleum and coal [3]	159.1	160.3	160.7	160.3	157.3	154.9	155.4	153.9	155.0	155.5	156.1	155.8	156.4	117.6
Petroleum refining	-------	158.3	159.8	159.2	156.7	155.2	155.0	153.1	153.5	153.7	153.4	153.5	154.9	113.4
Coke and byproducts	-------	148.4	146.7	145.9	143.2	136.8	141.4	139.6	140.6	138.3	138.2	136.5	135.1	117.4
Paving materials	-------	111.8	107.7	107.1	97.1	92.7	75.3	73.2	83.2	109.4	138.1	137 4	140.0	87.0
Roofing materials	-------	219.4	215.5	218.2	213.2	214.6	215.3	217.5	222.7	226.2	228.0	227.7	226.8	161.2
Rubber products [3]	162.8	160.9	157.7	161.6	161.1	163.8	168.9	172.0	173.5	175.3	174.0	171.7	168.1	160.3
Rubber tires and inner tubes	-------	168.7	167.6	169.4	168.5	170.7	177.7	182.4	185.5	187.8	188.7	188.0	185.2	166.1
Rubber boots and shoes	-------	148.3	139.4	146.9	146.4	149.0	152.4	153.8	151.5	151.4	147.9	146.1	141.6	160.5
Rubber goods, other	-------	156.3	152.7	157.5	157.5	161.9	165.3	166.9	167.4	169.1	166.0	162.0	157.8	154.1
Miscellaneous industries [3]	184.2	180.1	173.9	175.7	176.6	178.4	182.6	181.9	180.9	187.5	190.4	187.5	182.8	181.7
Instruments (professional and scientific), and fire-control equipment	-------	248.7	247.4	244.5	242.8	244.1	244.6	245.2	245.3	248.1	246.1	247.4	245.0	766.4
Photographic apparatus	-------	224.5	220.9	216.6	214.1	217.1	219.8	220.9	220.4	221.8	219.5	218.8	216.1	200.9
Optical instruments and ophthalmic goods	-------	208.8	201.0	215.6	224.1	226.9	229.1	230.0	233.6	235.4	232.1	231.6	231.6	280.3
Pianos, organs, and parts	-------	177.4	164.0	173.7	175.2	170.5	189.7	201.5	215.2	226.3	228.6	223.8	211.4	156.2
Games, toys, and dolls	-------	234.2	219.3	214.8	210.3	210.7	201.2	189.9	175.0	201.3	226.9	221.4	213.9	99.7
Buttons	-------	116.2	111.2	114.8	114.2	116.3	122.6	119.4	118.7	119.1	113.0	107.7	103.4	116.6
Fire extinguishers	-------	269.1	271.8	270.6	260.9	266.8	258.6	249.3	253.5	268.0	269.5	273.2	277.6	913.1

See footnotes 1 and 2, table A-5.

TABLE A-7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
All manufacturing	381.7	374.6	360.0	359.0	346.7	347.1	358.4	354.1	358.7	365.7	353.4	350.1	345.3	334.4
Durable goods	422.6	418.7	403.1	401.3	390.8	393.4	402.0	393.1	403.1	411.0	395.0	389.9	382.2	469.5
Nondurable goods	341.7	331.4	317.9	317.6	303.6	301.9	315.7	316.0	315.3	321.4	312.8	311.2	309.2	202.3
Durable goods														
Iron and steel and their products	366.1	361.1	336.9	340.5	334.4	329.6	340.8	337.6	341.9	345.8	335.1	331.6	327.7	311.4
Blast furnaces, steel works, and rolling mills	-------	295.3	269.9	268.4	265.4	253.0	260.9	257.5	261.2	257.8	255.1	251.9	254.5	222.3
Gray-iron and semisteel castings	-------	394.3	377.8	400.1	374.3	394.6	421.7	414.9	416.4	420.7	399.3	406.7	403.0	261.1
Malleable-iron castings	-------	478.0	448.8	468.1	460.3	453.0	469.7	467.6	480.1	479.8	459.6	448.7	425.9	278.9
Steel castings	-------	473.0	440.5	469.5	454.2	453.2	456.8	442.3	442.1	443.3	429.5	423.1	414.2	493.5
Cast-iron pipe and fittings	-------	432.0	414.3	422.0	401.4	370.0	397.5	392.5	394.4	404.0	381.4	382.3	366.6	177.2
Tin cans and other tinware	-------	364.3	353.2	310.8	286.1	274.9	289.8	302.4	320.0	336.7	320.7	331.9	349.2	161.6
Wire drawn from purchased rods	-------	262.1	242.8	243.3	249.8	255.3	269.1	268.7	271.6	280.3	270.1	267.6	259.5	255.3
Wirework	-------	326.0	315.1	295.7	298.2	302.0	316.4	309.0	320.5	321.9	297.4	289.0	290.1	202.6
Cutlery and edge tools	-------	358.7	335.7	343.6	357.8	364.6	370.6	377.2	381.9	386.3	384.1	372.2	359.1	279.5

See footnotes 1 and 2, table A-5.

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Con.

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Durable goods—Continued														
Iron and steel and their products—Continued														
Tools (except edge tools, machine tools, files, and saws)		372.8	358.7	370.8	366.6	372.4	378.4	379.0	381.0	381.0	363.0	352.6	347.9	334.1
Hardware		327.7	303.8	318.6	325.8	342.2	355.1	353.5	352.5	345.9	328.7	321.2	308.4	245.8
Plumbers' supplies		338.1	316.7	329.0	324.0	322.2	329.0	320.3	321.8	331.9	324.1	306.8	291.6	161.7
Stoves, oil burners, and heating equipment, not elsewhere classified		395.5	352.0	359.9	352.5	345.4	368.6	387.2	395.8	422.7	404.5	417.6	399.3	210.9
Steam and hot-water heating apparatus and steam fittings		423.2	397.2	409.5	406.0	393.8	416.5	425.1	403.7	430.9	419.4	403.0	394.1	360.6
Stamped and enameled ware and galvanizing		443.9	428.9	439.3	440.6	439.8	447.0	447.4	456.0	472.8	453.7	445.2	437.1	307.0
Fabricated structural and ornamental metal-work		364.8	329.0	345.2	345.7	340.6	343.4	335.4	339.7	360.1	350.5	347.7	339.4	364.3
Metal doors, sash, frames, molding, and trim		324.7	292.9	309.1	288.6	283.9	292.2	276.9	296.7	313.2	298.1	290.0	280.3	292.6
Bolts, nuts, washers, and rivets		423.9	401.0	412.8	408.2	416.7	422.4	406.0	393.1	406.0	391.5	386.0	369.4	382.0
Forgings, iron and steel		475.0	449.6	454.1	443.7	467.6	487.5	496.2	502.4	506.9	484.8	485.5	456.3	507.9
Wrought pipe, welded and heavy-riveted		494.6	473.0	467.3	443.1	437.7	455.3	433.2	457.2	472.7	443.1	427.3	396.6	610.9
Screw-machine products and wood screws		427.0	426.8	436.9	445.4	452.0	456.5	452.1	446.1	442.9	421.7	424.3	413.4	560.4
Steel barrels, kegs, and drums		337.4	301.4	313.3	302.6	298.1	302.0	300.5	333.7	334.0	308.6	299.6	325.6	247.0
Firearms		926.1	952.7	945.9	915.6	906.0	911.3	872.2	846.7	835.0	796.1	780.3	766.9	2984.8
Electrical machinery [2]	461.9	454.8	436.3	440.0	431.6	444.3	459.1	465.1	471.0	481.2	471.9	464.6	450.5	488.0
Electrical equipment		434.7	418.3	419.2	410.3	420.5	432.2	436.7	443.4	447.1	436.3	429.8	423.1	475.6
Radios and phonographs		468.9	456.9	458.6	451.4	468.5	488.4	495.6	507.3	542.9	539.6	533.2	501.9	505.0
Communication equipment		550.6	513.4	534.8	530.0	551.2	578.6	593.7	586.4	604.6	597.8	584.5	551.1	538.2
Machinery, except electrical	484.0	477.8	469.5	480.7	466.4	463.8	475.2	471.9	473.8	479.9	459.6	458.0	451.4	443.7
Machinery and machine-shop products		500.9	489.3	500.7	491.0	493.6	496.4	495.5	494.9	500.7	481.5	480.0	477.9	501.8
Engines and turbines		598.2	584.5	601.4	617.6	611.7	632.3	622.1	625.5	607.4	601.9	576.0	591.3	849.4
Tractors		356.1	366.4	355.5	285.4	248.9	353.8	351.9	354.3	347.0	336.9	333.1	322.2	256.7
Agricultural machinery, excluding tractors		558.3	573.3	595.4	571.2	571.9	576.8	550.5	534.9	522.7	482.5	504.6	494.1	298.6
Machine tools [3]		249.3	238.7	242.9	240.7	240.2	249.2	254.4	250.1	262.2	253.3	257.5	257.4	503.9
Machine-tool accessories		400.1	361.1	383.5	389.9	392.6	388.9	398.0	398.6	397.7	380.2	379.0	380.5	671.1
Textile machinery		460.0	437.9	459.1	444.8	441.3	443.2	420.9	417.9	417.4	396.3	381.7	366.0	230.1
Pumps and pumping equipment		585.1	585.2	596.5	610.3	610.0	617.7	627.0	622.0	628.1	607.7	611.1	627.1	761.8
Typewriters		297.5	318.7	325.2	325.0	336.8	347.5	357.6	366.1	369.6	358.2	342.3	321.6	143.8
Cash registers; adding, and calculating machines		494.6	506.2	505.9	489.4	504.7	499.9	489.0	491.9	490.7	463.5	455.8	441.9	341.6
Washing machines, wringers, and driers, domestic		468.4	438.5	480.9	454.2	465.3	454.0	470.4	464.3	484.2	449.7	430.5	400.0	301.5
Sewing machines, domestic and industrial		488.2	458.5	444.2	428.0	409.9	414.5	404.0	397.9	398.8	382.1	369.9	348.2	282.3
Refrigerators and refrigeration equipment		490.1	485.2	508.9	472.3	450.4	454.7	433.7	479.2	465.9	434.3	446.6	426.6	264.5
Transportation equipment, except automobiles	581.8	547.7	552.4	561.2	566.4	601.4	600.4	593.3	611.2	600.2	555.1	541.5	509.8	3080.3
Locomotives		599.4	907.3	913.7	916.4	928.1	908.6	869.2	883.0	900.3	863.1	870.1	875.3	1107.3
Cars, electric- and steam-railroad		516.9	467.9	492.5	478.5	483.8	490.3	479.5	500.6	522.4	503.5	493.6	468.8	457.9
Aircraft and parts, excluding aircraft engines		698.4	661.1	649.2	634.2	695.2	675.9	667.3	657.4	668.7	653.8	663.8	623.3	3496.3
Aircraft engines		453.7	533.1	517.5	493.5	481.0	473.9	469.4	482.9	503.5	479.2	499.9	501.3	4528.7
Shipbuilding and boatbuilding		291.6	305.3	321.7	345.7	373.6	383.7	385.4	416.7	378.9	316.6	289.9	262.0	3594.7
Motorcycles, bicycles, and parts		372.2	300.2	345.7	370.5	418.2	426.6	420.6	414.5	448.2	441.3	430.8	404.9	253.6
Automobiles		422.1	428.4	385.7	362.6	386.2	396.5	357.6	408.7	427.7	395.6	385.8	380.6	321.2
Nonferrous metals and their products [2]	415.4	379.3	360.6	368.2	362.5	368.3	377.1	372.9	372.7	377.8	367.3	359.3	349.5	354.5
Smelting and refining, primary, of nonferrous metals	386.3	345.7	338.6	329.7	321.6	314.1	307.2	303.7	303.1	299.9	300.3	296.0	302.5	353.9
Alloying; and rolling and drawing of nonferrous metals, except aluminum		295.6	294.3	278.3	268.9	271.7	283.5	273.2	273.4	271.9	263.7	260.6	257.6	353.4
Clocks and watches		334.9	304.5	332.2	327.4	336.8	339.1	333.4	326.2	333.3	330.5	320.1	311.7	238.4
Jewelry (precious metals) and jewelers' findings		365.9	345.7	372.5	362.4	377.7	391.8	396.2	383.4	415.6	403.6	393.4	360.2	211.8
Silverware and plated ware		528.2	481.8	527.4	522.4	529.4	543.3	525.6	520.5	535.5	507.4	496.2	480.6	212.8
Lighting equipment		330.1	317.0	305.9	293.3	308.3	328.4	333.7	337.8	343.0	333.9	333.8	325.9	240.4
Aluminum manufactures		331.8	315.6	338.5	347.0	356.8	362.0	366.8	371.3	364.7	351.7	345.5	325.5	591.6
Sheet-metal work, not elsewhere classified		459.9	438.4	438.1	430.2	434.8	450.6	447.1	454.4	478.2	454.0	456.3	431.5	357.6
Lumber and timber basic products [2]	523.3	538.8	502.9	488.5	461.1	433.4	427.6	417.2	413.5	431.8	429.1	427.2	427.4	215.1
Sawmills and logging camps		604.6	563.3	543.3	*496.8	471.0	466.4	452.4	450.3	473.4	476.2	476.2	480.4	238.3
Planing and plywood mills		485.6	456.3	456.1	445.1	435.4	424.7	422.2	417.1	421.1	400.9	395.0	379.5	197.8
Furniture and finished lumber products [2]	344.5	339.7	320.4	326.0	325.6	333.0	349.2	350.2	352.2	355.7	343.0	338.8	324.3	183.9
Mattresses and bedsprings		385.5	354.1	347.9	340.2	359.5	387.9	410.9	414.0	420.8	396.6	402.8	378.3	165.7
Furniture		337.3	317.7	325.7	328.6	336.3	353.4	356.0	355.4	356.2	344.0	335.2	316.6	185.3
Wooden boxes, other than cigar		334.1	318.6	325.7	301.1	304.8	320.5	311.8	324.4	332.4	321.4	328.6	324.1	215.8
Caskets and other morticians' goods		287.8	273.4	283.4	289.2	300.3	315.7	310.5	314.4	319.1	305.8	299.3	301.2	159.3
Wood preserving		377.0	373.5	358.1	351.5	334.2	331.6	311.6	352.3	369.9	375.8	408.7	418.4	181.9
Wood, turned and shaped		339.0	318.3	322.8	325.1	331.8	339.0	327.9	318.0	325.2	309.5	306.2	298.9	175.5
Stone, clay, and glass products	361.4	359.4	335.5	347.1	343.4	337.9	336.6	321.4	322.9	335.7	331.2	328.2	320.2	189.1
Glass and glassware		356.6	316.8	348.5	352.5	355.3	358.2	340.0	343.4	356.5	357.2	351.2	342.8	208.3
Glass products made from purchased glass		272.7	258.8	267.7	264.5	259.9	267.6	267.0	271.6	287.1	269.4	264.0	251.5	165.9
Cement		331.9	328.7	323.5	314.3	297.2	287.3	282.8	284.7	291.3	294.0	294.7	298.3	156.5
Brick, tile, and terra cotta		349.2	335.1	329.9	320.8	305.6	297.1	279.0	296.9	301.9	296.7	300.2	294.1	135.8
Pottery and related products		374.8	336.6	355.2	351.1	348.7	352.9	337.4	337.8	354.4	349.8	342.7	326.5	191.9

See footnotes 1 and 2, table A–5.

ABLE A-7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Con.

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept	Aug	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Durable goods—Continued														
one, clay, and glass products—Continued														
Gypsum		331.4	307.5	306.1	303.7	298.6	285.4	278.4	283.0	290.2	284.5	278.1	258.3	151.7
Wallboard, plaster (except gypsum), and mineral wool		420.3	426.5	412.9	403.8	406.6	390.1	375.5	374.1	386.5	381.5	368.4	357.8	223.8
Lime		281.3	268.9	270.7	273.3	273.3	262.1	243.8	249.5	256.9	259.5	258.9	245.5	171.6
Marble, granite, slate, and other products		192.0	184.9	185.9	183.2	176.6	179.3	169.5	173.5	183.3	175.9	183.5	180.9	90.8
Abrasives		492.2	488.4	502.4	490.6	474.9	487.0	457.4	363.2	462.1	418.2	408.0	498.2	480.2
Asbestos products		343.0	327.5	334.5	329.9	328.9	327.0	322.3	325.0	318.7	313.6	305.6	299.2	254.6
Nondurable goods														
extile-mill products and other fiber manufactures	295.5	298.0	285.4	304.6	303.8	307.1	315.6	310.6	303.0	302.0	288.2	271.8	262.9	178.9
Cotton manufactures, except smallwares		356.5	341.3	365.9	369.7	374.7	385.1	377.0	378.7	376.4	362.1	329.1	317.4	215.9
Cotton smallwares		226.7	226.0	238.0	238.3	243.0	249.1	249.3	243.8	234.1	215.1	213.6	210.6	214.6
Silk and rayon goods		274.0	257.1	271.5	268.6	267.4	267.8	262.4	252.6	248.1	236.6	227.6	220.2	138.6
Woolen and worsted manufactures, except dyeing and finishing		297.1	294.9	311.5	307.9	308.6	322.1	321.1	292.0	294.4	276.6	270.4	268.5	199.5
Hosiery		188.3	171.1	185.6	183.6	189.2	197.6	190.5	188.8	193.5	186.4	177.2	166.4	109.6
Knitted cloth		229.0	223.9	223.2	223.1	237.1	243.3	242.6	236.5	231.6	221.7	214.4	207.8	174.7
Knitted outerwear and knitted gloves		226.6	212.0	242.2	247.6	242.8	249.9	250.3	234.3	241.6	243.0	237.0	215.3	102.7
Knitted underwear		290.8	283.4	301.8	303.4	320.3	323.7	311.0	306.6	306.9	295.4	282.8	274.3	183.3
Dyeing and finishing textiles, including woolen and worsted		287.1	278.4	297.8	299.0	305.6	308.8	311.2	304.1	298.1	279.8	271.3	269.5	174.9
Carpets and rugs, wool		354.2	342.1	345.4	332.8	324.2	327.9	321.8	316.8	311.6	297.6	288.7	276.5	145.2
Hats, fur-felt		199.8	174.3	197.4	184.6	176.4	197.5	202.2	195.8	202.1	181.9	185.9	177.2	121.5
Jute goods, except felts		281.5	272.4	277.5	272.2	275.9	264.2	265.7	250.1	175.4	170.1	168.7	163.7	196.4
Cordage and twine		285.7	287.6	306.5	303.4	311.4	330.4	337.6	330.6	320.0	300.6	282.0	258.6	240.3
pparel and other finished textile products	349.4	343.4	303.6	303.6	297.9	306.5	343.2	345.2	337.0	327.3	304.8	320.5	303.8	185.2
Men's clothing, not elsewhere classified		323.5	294.1	312.9	311.5	317.1	324.8	316.4	313.4	309.5	301.5	303.5	284.9	174.9
Shirts, collars, and nightwear		256.2	246.6	258.5	266.8	274.6	279.7	272.0	273.0	281.3	266.0	258.9	243.2	143.6
Underwear and neckwear, men's		293.8	269.6	289.1	296.7	297.0	313.7	300.0	292.0	304.0	292.9	280.2	261.3	166.5
Work shirts		334.8	326.4	333.9	325.8	316.1	305.6	284.6	247.5	248.2	253.1	262.0	266.9	220.4
Women's clothing, not elsewhere classified		381.7	326.6	310.7	299.3	307.1	376.4	387.1	374.8	355.9	319.3	349.5	334.7	184.4
Corsets and allied garments		213.1	197.8	210.8	213.0	229.1	241.6	237.7	234.5	230.5	226.8	219.0	205.4	137.1
Millinery		198.7	164.7	132.0	127.9	171.3	212.5	236.0	204.4	157.4	123.6	195.2	173.1	123.3
Handkerchiefs		236.2	181.3	231.0	239.1	251.5	259.4	243.4	222.5	251.2	260.4	251.4	239.4	184.0
Curtains, draperies, and bedspreads		392.0	317.6	335.1	334.8	348.5	397.0	431.4	419.1	424.7	422.2	412.1	371.9	230.2
Housefurnishings, other than curtains, etc		632.3	573.0	587.3	544.2	584.6	609.2	572.9	597.8	653.1	590.1	632.2	604.6	370.3
Textile bags		521.9	498.3	471.1	464.8	446.4	449.3	461.7	481.1	492.9	484.8	472.6	458.8	233.0
eather and leather products [2]	246.0	249.0	236.9	233.4	215.4	227.1	251.7	262.5	258.7	259.6	252.5	251.8	248.1	154.2
Leather		207.3	203.6	205.2	201.1	197.9	206.4	216.4	214.8	217.5	213.8	212.9	212.0	140.6
Boot and shoe cut stock and findings		189.5	178.6	179.9	169.6	173.4	187.9	198.6	201.4	202.6	190.3	189.6	191.4	142.2
Boots and shoes		244.0	231.1	225.3	202.8	219.5	249.7	261.0	258.3	256.0	246.7	246.6	243.7	142.0
Leather gloves and mittens		285.4	267.4	273.6	256.9	241.3	252.8	252.2	245.3	262.4	264.1	267.5	253.5	239.4
Trunks and suitcases		376.2	339.5	339.5	339.8	347.2	364.1	366.9	321.6	369.3	406.0	381.8	335.9	240.3
ood	389.8	350.2	351.4	328.3	281.3	267.4	285.8	288.5	296.6	321.9	323.5	332.8	356.1	180.9
Slaughtering and meat packing		275.4	296.9	306.9	211.3	179.9	276.6	263.3	304.2	338.9	317.4	271.7	271.9	188.6
Butter		415.0	429.5	429.8	407.2	381.0	348.2	332.7	330.3	342.2	346.0	353.4	364.8	231.0
Condensed and evaporated milk		488.5	506.3	520.3	477.9	438.1	403.0	388.1	369.8	364.0	377.8	402.5	419.8	268.5
Ice cream		345.5	363.2	341.5	311.3	286.4	261.3	250.9	248.0	258.5	269.9	288.5	326.2	170.6
Flour		343.5	343.5	317.3	294.0	285.1	275.8	298.3	305.9	319.4	336.9	336.4	334.7	182.9
Feeds, prepared		401.7	397.2	391.7	367.4	337.1	329.6	314.7	379.0	381.4	346.9	358.6	382.9	230.0
Cereal preparations		344.2	374.8	353.7	333.6	313.0	297.8	322.2	307.8	306.3	313.7	304.4	337.5	223.3
Baking		247.4	247.6	245.4	235.1	227.6	227.1	234.1	221.5	229.2	227.8	230.8	223.2	153.0
Sugar refining, cane		303.6	313.7	244.7	227.9	229.3	248.4	232.3	216.9	248.9	302.3	279.1	278.7	152.8
Sugar, beet		146.9	128.0	123.0	111.8	96.7	98.9	126.7	188.0	392.8	516.8	464.0	214.3	119.6
Confectionery		268.2	229.0	235.1	*213.9	241.1	260.1	275.6	295.3	326.6	325.1	312.2	271.3	157.6
Beverages, nonalcoholic		309.3	343.3	304.2	277.0	257.9	241.0	226.7	237.1	236.3	240.0	258.7	295.6	163.2
Malt liquors		376.9	391.8	351.0	299.9	316.0	293.0	289.9	289.4	307.7	326.8	344.1	370.3	180.5
Canning and preserving		471.2	421.2	282.9	234.2	216.9	204.6	216.5	216.2	250.2	265.7	437.9	683.8	216.0
obacco manufactures [3]	214.8	218.3	205.5	205.8	201.3	205.7	204.6	195.7	210.5	219.8	216.3	214.5	205.3	151.0
Cigarettes		288.3	270.0	263.1	253.1	254.3	246.5	219.2	259.6	267.9	253.3	252.8	243.7	172.0
Cigars		180.9	171.1	175.8	175.1	182.7	186.6	189.4	188.2	196.7	201.7	196.4	185.4	141.0
Tobacco (chewing and smoking) and snuff		173.3	164.1	166.7	161.8	161.6	159.6	162.2	161.2	175.8	169.0	178.1	177.0	132.3
aper and allied products [3]	352.5	349.6	341.7	337.8	331.1	325.7	330.8	328.9	328.0	334.0	325.9	320.5	315.5	184.8
Paper and pulp		363.6	357.7	347.7	343.2	333.3	335.6	333.8	330.3	332.5	325.0	322.6	322.0	181.6
Paper goods, other		347.4	355.3	358.4	355.0	350.7	354.2	352.9	355.1	362.4	352.7	344.4	334.2	193.2
Envelopes		288.2	272.9	284.0	283.3	282.1	283.7	282.8	278.0	284.1	281.5	279.8	273.7	165.7
Paper bags		392.7	380.0	364.4	355.4	365.3	373.7	357.8	368.1	370.2	347.4	350.0	333.9	183.4
Paper boxes		318.6	294.9	304.8	290.4	292.5	305.4	307.1	309.1	321.9	314.5	304.2	291.5	189.6
rinting, publishing, and allied industries [3]	273.6	264.8	260.1	264.9	262.2	259.5	258.5	254.7	255.3	263.1	257.2	252.8	249.7	124.7
Newspapers and periodicals		240.6	235.5	238.1	236.5	234.6	229.2	224.6	218.9	230.0	224.0	221.6	221.6	111.7
Printing, book and job		297.6	296.0	299.3	296.7	291.0	292.5	290.9	295.9	297.8	292.5	285.8	279.3	137.3
Lithographing		232.8	223.5	230.3	224.1	221.4	227.2	219.0	224.0	237.1	236.1	226.2	225.9	124.9
Bookbinding		304.2	290.1	310.0	302.9	304.0	313.4	307.7	315.3	326.6	325.1	325.4	322.9	174.8

See footnotes 1 and 2, table A-5.

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Con

[1939 average=100]

Industry group and industry	1948									1947				An- nual aver- age
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	194
Nondurable goods—Continued														
Chemicals and allied products [2]	462.5	450.6	432.7	434.9	422.5	422.1	425.1	425.6	426.7	424.1	416.4	409.6	403.1	
Paints, varnishes, and colors	-------	345.1	343.0	335.6	329.9	315.9	319.1	324.4	318.6	315.8	313.1	304.2	300.3	
Drugs, medicines, and insecticides	-------	485.3	480.6	486.7	481.5	479.9	487.6	489.2	490.7	488.5	489.9	499.1	484.7	
Perfumes and cosmetics	-------	238.7	205.5	213.7	209.7	215.1	222.0	231.2	230.9	240.5	265.3	250.1	228.2	
Soap	-------	368.5	344.3	343.1	322.9	321.8	359.0	376.4	379.3	381.3	371.0	357.6	351.6	
Rayon and allied products	-------	302.7	289.6	280.2	275.1	274.6	271.9	270.2	268.6	265.9	260.5	257.8	259.9	
Chemicals, not elsewhere classified	-------	629.1	600.4	613.6	589.6	591.1	584.3	584.8	586.8	580.8	566.0	554.9	552.3	
Explosives and safety fuses	-------	798.3	760.2	737.6	683.8	648.3	675.2	678.2	669.2	651.5	645.6	612.0	608.2	
Compressed and liquefied gases	-------	512.0	518.2	505.4	491.7	483.7	473.6	475.5	465.0	459.6	458.0	445.6	455.3	
Ammunition, small-arms	-------	403.1	420.8	411.2	404.1	398.8	396.8	388.7	380.5	411.9	398.0	393.3	381.4	
Fireworks	-------	640.1	507.0	572.5	594.9	572.5	625.8	610.2	591.6	633.8	711.6	747.3	577.7	
Cottonseed oil	-------	261.7	230.1	228.3	245.9	270.2	316.4	338.0	397.4	448.4	448.7	443.1	315.8	
Fertilizers	-------	410.1	396.7	414.5	470.4	530.1	540.2	482.2	475.2	430.8	397.2	409.7	428.1	
Products of petroleum and coal [3]	345.6	358.2	353.4	342.2	335.8	316.7	320.0	315.4	318.1	313.3	309.5	301.8	307.5	
Petroleum refining	-------	345.5	344.9	330.8	326.2	310.9	306.6	302.1	303.9	300.4	295.9	286.6	294.4	
Coke and byproducts	-------	348.0	329.5	330.1	320.6	287.3	314.6	312.3	309.8	294.8	292.7	288.1	280.0	
Paving materials	-------	258.9	246.3	235.0	222.8	206.5	173.1	160.6	168.2	224.8	268.8	295.9	297.9	
Roofing materials	-------	548.7	531.9	523.3	508.5	495.6	502.7	500.7	508.3	535.7	526.4	523.1	510.5	
Rubber products [3]	344.9	347.2	329.7	330.2	318.9	312.8	320.6	337.2	354.9	373.6	361.4	354.4	348.3	
Rubber tires and inner tubes	-------	341.0	329.8	322.0	305.7	286.4	292.4	315.4	344.4	365.6	362.4	354.7	355.3	
Rubber boots and shoes	-------	344.1	321.7	329.7	328.1	333.9	347.0	345.0	342.8	367.1	322.4	331.7	314.4	
Rubber goods, other	-------	358.3	331.9	343.7	337.7	347.1	356.2	366.2	368.3	379.9	362.2	352.3	338.3	
Miscellaneous industries [3]	411.8	397.4	374.2	386.7	384.2	382.6	394.0	393.9	388.2	405.1	403.9	394.1	378.2	
Instruments (professional and scientific), and fire-control equipment	-------	508.3	487.2	491.0	492.6	494.2	489.3	487.1	507.5	490.2	480.8	478.9	469.3	
Photographic apparatus	-------	444.1	443.8	438.8	*409.7	416.2	422.3	424.2	418.1	421.1	416.8	405.1	394.3	
Optical instruments and ophthalmic goods	-------	415.2	393.1	421.6	426.7	438.1	444.8	446.3	452.3	458.5	445.3	443.5	442.3	
Pianos, organs, and parts	-------	374.3	339.8	362.7	367.8	357.9	396.0	421.1	455.5	513.4	500.1	475.6	460.2	
Games, toys, and dolls	-------	557.8	513.1	510.6	496.7	487.6	463.7	450.1	399.7	469.5	525.9	518.7	482.3	
Buttons	-------	275.3	254.0	271.7	269.4	269.4	284.3	285.5	275.7	280.8	262.5	245.8	230.2	
Fire extinguishers	-------	566.7	573.0	595.6	563.4	575.5	541.0	523.2	546.8	520.4	560.6	555.4	558.9	

See footnotes 1 and 2, table A–5. *Revised.

TABLE A–8: Estimated Number of Employees in Selected Nonmanufacturing Industries [1]

[In thousands]

Industry group and industry	1948									1947				Annual average	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943	193
Mining: [2]															
Coal:															
Anthracite	77.5	77.6	76.1	77.4	76.4	76.9	77.4	76.6	76.2	76.5	76.2	76.2	76.0	78.4	8
Bituminous	408	407	378	407	405	296	401	397	404	402	399	397	394	419	37
Metal	89.7	88.4	91.7	92.8	91.4	91.7	91.4	90.2	89.7	89.8	89.4	88.7	89.6	112.7	9
Iron	33.6	33.8	33.7	33.7	32.7	32.5	31.5	31.0	30.9	31.3	32.0	32.4	32.4	35.3	2
Copper	27.0	26.6	26.6	26.7	26.5	26.8	26.9	27.0	26.9	26.6	26.1	25.8	25.7	33.3	2
Lead and zinc	13.0	12.0	15.0	16.2	16.4	16.3	16.3	16.3	15.7	15.6	15.4	14.9	15.5	21.6	1
Gold and silver	8.2	8.1	8.3	8.3	8.1	8.5	8.7	8.7	8.6	8.5	8.1	8.0	8.2	7.7	2
Miscellaneous	7.9	8.0	8.0	7.9	7.7	7.7	7.9	7.8	7.7	7.9	7.8	7.6	7.7	14.8	4
Quarrying and nonmetallic	87.8	87.4	86.8	86.8	85.1	83.9	80.0	76.8	79.9	83.9	86.4	87.3	88.1	80.9	6
Crude petroleum and natural gas production [4]	133.2	137.1	136.6	133.5	128.7	127.2	127.1	127.1	126.4	126.3	126.4	127.1	128.7	103.2	11
Transportation and public utilities:															
Class I steam railroads [5]	1,350	1,354	1,361	1,352	1,321	1,258	1,316	1,311	1,318	1,331	1,340	1,357	1,364	1,355	96
Street railways and busses [6]	247	247	246	249	249	249	249	249	250	249	249	249	251	227	19
Telephone	642	647	644	633	630	630	627	623	620	620	614	609	613	402	31
Telegraph [7]	34.7	35.1	36.0	36.1	36.3	36.9	36.9	36.8	36.6	36.7	36.6	36.9	37.6	46.9	3
Electric light and power	284	286	283	279	274	273	271	269	268	269	268	267	268	211	24
Service:															
Hotels (year-round)	373	370	375	379	377	377	375	377	378	381	378	380	379	344	32
Power laundries [3]	232	233	239	238	233	232	231	230	235	237	238	241	243	252	19
Cleaning and dyeing [3]	88.7	89.7	92.6	94.7	93.4	92.5	90.0	86.8	88.9	91.0	92.7	95.6	94.3	78.0	5

[1] Unless otherwise noted, includes all nonsupervisory employees and working supervisors. Data for the three most recent months are subject to revision without notation. Revised figures for earlier months are identified by an asterisk for the first month's publication of such data.

[2] Includes production and related workers only.

[3] Estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 benchmark levels, thereby providing consistent series.

[4] Does not include well drilling or rig building.

[5] Includes all employees at middle of month. Excludes employees o switching and terminal companies. Class I steam railroads include thos with over $1,000,000 annual revenue. Source: Interstate Commerce Com mission.

[6] Includes private and municipal street-railway companies, and affiliated subsidiary, or successor trolley-bus and motor-bus companies.

[7] Includes all land-line employees except those compensated on a commis sion basis. Excludes general and divisional headquarters personnel, trainee in school, and messengers.

TABLE A–9: Indexes of Employment in Selected Nonmanufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Mining: [2] [3]														
Coal:														
Anthracite	92.7	92.8	91.1	92.6	91.4	91.9	92.6	91.6	91.1	91.5	91.2	91.2	91.0	93.7
Bituminous	109.7	109.5	101.7	109.6	108.9	79.7	108.0	106.8	108.7	108.3	107.4	106.8	106.0	112.6
Metal	96.9	95.5	99.1	100.2	98.7	99.0	98.7	97.4	96.9	97.0	96.5	95.8	96.8	121.7
Iron	159.2	159.9	159.6	159.6	155.0	153.7	149.4	146.8	146.5	148.0	151.3	153.3	153.6	167.4
Copper	108.2	106.5	106.6	106.9	106.0	107.2	107.9	108.2	107.5	106.6	104.4	103.1	103.0	133.2
Lead and zinc	79.8	74.0	92.2	99.7	100.6	100.4	100.2	99.9	96.2	95.8	94.8	91.8	95.5	132.7
Gold and silver	31.4	30.9	32.0	31.9	31.3	32.5	33.3	33.4	33.1	32.5	31.3	30.9	31.5	29.7
Miscellaneous	188.9	190.0	191.3	188.6	182.9	182.8	189.1	187.0	183.0	187.2	185.7	181.6	184.6	352.0
Quarrying and nonmetallic	128.3	127.7	126.7	126.8	124.2	122.5	118.2	113.7	116.7	122.6	126.2	127.6	128.7	118.2
Crude petroleum and natural gas production [4]	116.4	119.8	119.4	116.7	112.5	111.2	111.1	111.1	110.5	110.4	110.5	111.1	112.5	90.2
Transportation and public utilities:														
Class I steam railroads [5]	136.7	137.1	137.9	136.9	133.8	127.3	133.3	132.7	133.4	134.8	135.7	137.4	138.1	137.2
Street railways and busses [6]	127.3	127.5	127.2	128.3	128.5	128.3	128.7	128.6	129.2	128.6	128.7	128.8	129.6	117.0
Telephone	202.2	203.7	202.8	199.4	198.4	198.3	197.4	196.2	195.0	195.0	193.3	191.6	192.9	126.7
Telegraph [7]	92.3	93.3	95.7	96.0	96.3	97.9	98.2	97.8	97.2	97.6	97.2	98.1	99.8	124.7
Electric light and power	116.3	117.1	115.8	114.1	112.3	111.7	110.9	110.3	109.8	110.3	109.7	109.4	109.9	86.3
Trade: [8]														
Wholesale	117.1	117.0	116.2	115.3	114.5	114.8	115.3	116.1	116.3	117.1	116.5	115.5	113.3	95.9
Retail	113.4	111.2	112.0	113.6	113.1	112.8	113.8	111.8	114.4	130.2	119.8	115.8	112.4	99.9
Food	112.0	112.3	113.8	115.5	116.3	116.1	116.7	113.9	114.4	117.4	116.1	115.0	112.6	106.2
General merchandise	127.2	120.6	121.3	124.8	123.7	123.4	124.5	122.9	129.4	175.5	143.6	131.5	122.8	116.9
Apparel	113.9	105.1	108.0	115.4	115.2	114.6	116.8	108.2	111.5	136.7	124.0	119.4	113.5	110.1
Furniture and housefurnishings	91.6	90.2	90.5	91.2	91.9	91.6	91.9	91.0	93.6	97.4	92.4	89.5	87.5	67.7
Automotive	110.1	111.1	109.8	108.4	107.0	107.1	105.8	105.7	106.5	109.9	107.6	105.6	104.8	63.0
Lumber and building materials	128.0	129.6	128.2	126.3	123.7	121.9	119.4	118.8	122.5	126.1	126.4	126.9	124.5	91.5
Service:														
Hotels (year-round)	115.7	114.6	116.2	117.6	117.0	116.9	116.4	116.8	117.2	118.1	117.1	117.7	117.4	106.6
Power laundries [9]	118.4	119.0	122.1	121.5	119.0	118.3	117.7	117.6	120.1	120.9	121.3	123.1	124.3	128.7
Cleaning and dyeing [9]	152.5	154.2	159.2	162.9	160.6	159.0	154.8	149.3	152.8	156.5	159.4	164.4	162.1	134.0

[1] See footnote 1, table A–8.
[2] See footnote 2, table A–8.
[3] See footnote 3, table A–8.
[4] See footnote 4, table A–8.
[5] See footnote 5, table A–8.
[6] See footnote 6, table A–8.
[7] See footnote 7, table A–8.
[8] Data include all nonsupervisory employees and working supervisors.

TABLE A–10: Indexes of Weekly Pay Rolls in Selected Nonmanufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948									1947				Annual average
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	1943
Mining: [2] [3]														
Coal:														
Anthracite	247.3	259.4	192.7	246.0	246.2	195.4	255.9	232.8	242.4	239.4	224.4	252.7	237.9	146.1
Bituminous	352.9	366.8	293.8	344.2	344.3	167.4	342.0	320.0	350.5	345.8	327.4	327.5	321.6	203.3
Metal	212.6	209.8	202.2	208.2	206.1	201.7	201.3	201.7	198.9	198.8	194.8	192.7	193.6	184.9
Iron	366.8	355.6	333.1	345.0	336.3	319.7	313.8	310.3	302.7	301.1	310.2	315.5	311.0	257.9
Copper	248.1	255.3	242.4	232.9	232.6	232.6	234.8	241.7	238.0	236.5	224.7	222.9	225.3	214.6
Lead and zinc	199.2	189.1	193.2	238.1	238.9	235.8	232.8	235.0	228.1	231.6	220.6	209.7	216.0	226.7
Gold and silver	54.1	54.2	55.2	54.2	54.6	55.2	56.7	58.4	56.4	56.5	53.7	51.7	52.1	37.2
Miscellaneous	406.7	387.5	383.0	360.7	352.5	343.1	349.2	347.4	348.4	349.2	346.7	338.1	339.6	560.7
Quarrying and nonmetallic	342.4	340.7	322.3	321.7	312.5	295.4	272.7	262.0	272.8	295.3	305.7	319.2	315.9	199.6
Crude petroleum and natural gas production [4]	235.6	251.0	240.8	227.1	223.4	213.4	208.3	219.9	215.5	203.2	211.0	199.9	206.5	128.0
Transportation and public utilities:														
Class I steam railroads [5]	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Street railways and busses [6]	233.4	235.2	232.2	231.2	228.1	227.1	232.6	234.7	230.1	226.7	223.6	223.2	224.1	155.7
Telephone	335.3	331.3	336.1	327.1	326.1	317.7	314.7	316.3	315.8	313.0	321.5	314.2	312.3	144.9
Telegraph [7]	220.4	225.5	233.2	228.5	231.1	224.8	213.0	212.6	209.5	207.8	206.8	208.1	211.8	159.3
Electric light and power	205.1	204.9	202.8	196.4	192.1	188.6	184.4	188.2	187.9	185.7	187.6	182.8	183.1	109 2
Trade: [8]														
Wholesale	220.8	220.6	215.3	211.8	211.8	211.0	210.8	214.9	211.7	213.9	213.6	206.9	203.3	127.0
Retail	219.4	218.1	218.3	218.3	213.8	211.1	210.4	208.4	209.4	237.6	216.5	207.1	202.5	120.6
Food	226.0	229.0	232.9	231.9	227.0	225.5	226.1	221.5	219.4	221.5	220.0	213.8	209.2	129.2
General merchandise	238.3	231.2	233.6	236.5	229.2	225.8	225.5	221.4	233.0	314.0	251.1	225.2	220.4	135.9
Apparel	210.8	195.5	202.1	214.3	211.8	209.2	208.8	194.3	198.8	248.8	222.7	213.5	203.5	133.9
Furniture and housefurnishings	179.9	178.5	176.7	179.6	180.3	175.6	173.7	177.8	174.5	192.9	177.3	167.6	159.8	86.5
Automotive	217.0	219.6	213.4	209.6	205.3	204.7	197.5	196.8	193.9	204.2	198.6	193.8	188.5	84.7
Lumber and building materials	258.3	264.6	257.3	252.8	242.6	234.9	228.6	227.6	228.0	238.1	233.5	238.8	231.8	120.7
Service:														
Hotels (year-round) [9]	235.0	233.9	234.4	236.3	234.6	233.4	229.0	233.2	230.4	233.2	228.6	226.9	222.4	138.7
Power laundries [9]	232.9	228.1	240.6	238.3	232.3	231.5	227.5	225.4	232.9	233.6	226.8	232.3	236.2	167.0
Cleaning and dyeing [9]	296.8	286.9	308.0	324.8	312.4	308.0	291.2	271.9	285.6	292.8	293.7	303.8	301.7	185.4

[1] See footnote 1, table A–8.
[2] See footnote 2, table A–8.
[3] See footnote 3, table A–8.
[4] See footnote 4, table A–8.
[5] Not available.
[6] See footnote 6, table A–8.
[7] See footnote 7, table A–8.
[8] See footnote 8, table A–9.
[9] Money payments only; additional value of board, room, uniforms, and tips, not included.

TABLE A–11: Total Federal Employment by Branch and Agency Group [1]

Year and month	All branches	Executive [2]				Legislative	Judicial	Government corporations [3]
		Total	Defense agencies [4]	Post Office Department [5]	All other agencies			
	Total (including areas outside continental United States)							
1939	968,596	935,493	207,979	319,474	408,040	5,373	2,260	25,470
1943	3,183,235	3,138,838	2,304,752	364,092	469,994	6,171	2,626	36,600
1947: September	2,020,873	1,980,084	906,989	425,449	647,646	7,184	3,406	30,199
October	2,002,385	1,962,042	901,197	425,005	635,840	7,118	3,430	29,795
November	2,006,412	1,966,339	905,251	429,789	631,299	7,068	3,453	29,552
December	2,229,164	2,189,436	894,855	667,912	626,669	7,046	3,450	29,229
1948: January	1,985,792	1,946,076	890,719	432,920	622,437	7,046	3,461	29,209
February	*1,992,166	*1,952,537	895,850	*432,700	623,987	7,101	3,470	29,058
March	*2,004,136	*1,964,337	897,917	*439,521	626,899	7,217	3,462	29,120
April	*2,020,629	*1,981,002	903,814	*449,264	627,924	7,186	3,461	28,980
May	*2,038,851	*1,999,238	909,885	*455,711	633,642	7,257	3,468	28,888
June	*2,053,854	*2,014,457	916,864	*458,248	639,345	7,308	3,459	28,628
July	2,083,942	2,044,356	919,784	471,202	653,370	7,305	3,477	28,804
August	2,094,608	2,055,418	924,555	476,429	654,434	7,341	3,495	28,354
September	2,108,284	2,068,741	933,237	481,615	653,889	7,377	3,485	28,681
	Continental United States							
1939	926,659	897,602	179,381	318,802	399,419	5,373	2,180	21,504
1943	2,913,534	2,875,928	2,057,696	363,297	454,935	6,171	2,546	28,889
1947: September	1,781,733	1,748,530	704,575	424,005	619,950	7,184	3,334	22,685
October	1,764,384	1,731,411	699,815	423,473	608,123	7,118	3,358	22,497
November	1,771,360	1,738,587	706,418	428,252	603,917	7,068	3,381	22,324
December	2,005,563	1,973,066	708,099	665,662	599,305	7,046	3,377	22,074
1948: January	*1,763,299	*1,730,875	704,251	*431,393	595,231	7,046	3,388	21,990
February	*1,766,134	*1,733,702	705,792	*431,218	596,692	7,101	3,396	21,935
March	*1,778,502	*1,745,873	708,934	*437,946	598,993	7,217	3,388	22,024
April	*1,791,678	*1,759,098	710,991	*447,682	600,425	7,186	3,387	22,007
May	*1,808,661	*1,776,142	717,072	*454,126	604,944	7,257	3,394	21,868
June	*1,823,900	*1,791,498	724,683	*456,637	610,178	7,308	3,388	21,706
July	1,857,830	1,825,196	732,217	469,609	623,370	7,305	3,406	21,923
August	1,875,130	1,842,454	742,925	474,806	624,723	7,341	3,424	21,911
September	1,893,249	1,860,651	756,512	479,984	624,155	7,377	3,409	21,812

[1] Employment represents an average for the year or is as of the first of the month. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Exclude seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission, included by Civil Service Commission starting January 1947; (2) exclude substitute rural mail carriers, included by the Civil Service Commission since September 1945; (3) include in December the additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) include an upward adjustment to Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (5) the Panama R. R. Co. is shown under Government corporations here, but is included under the executive branch by the Civil Service Commission; (6) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Data for Central Intelligence Agency are excluded starting August 1947.

[2] From 1939 through June 1943 employment was reported for all areas monthly and employment within continental United States was secured by deducting the number of persons outside the continental area, which was estimated from actual reports as of January 1939 and 1940 and of July 1941 and 1943. From July 1943, through December 1946, employment within continental United States was reported monthly and the number of persons outside the country (estimated from quarterly reports) was added to secure employment in all areas. Beginning January 1947, employment is reported monthly both inside and outside continental United States.

[3] Data for current months cover the following corporations: Federal Reserve banks, mixed ownership banks of the Farm Credit Administration, and the Panama R. R. Co. Data for earlier years include at various times the following additional corporations: Inland Waterways Corporation, Spruce Production Corporation, and certain employees of the Federal Deposit Insurance Corporation and of the Office of the Comptroller of the Currency, Treasury Department. Corporations not included in this column are under the executive branch.

[4] Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

[5] For ways in which data differ from published figures of the Civil Service Commission, see footnote 1. Employment figures include fourth-class postmasters in all months. Prior to July 1945, clerks at third-class post offices were hired on a contract basis and therefore, because of being private employees, are excluded here. They are included beginning July 1945, however, when they were placed on the regular Federal pay roll by congressional action.

*Revised.

TABLE A–12: Total Federal Pay Rolls by Branch and Agency Group [1]

[In thousands]

Year and month	All branches	Executive [2]				Legislative	Judicial	Government corporations [3]
		Total	Defense agencies [4]	Post Office Department [5]	All other agencies			
	Total (including areas outside continental United States)							
1939	$1,757,292	$1,692,824	$357,628	$586,347	$748,849	$14,767	$6,691	$43,010
1944 [6]	8,301,111	8,206,411	6,178,387	864,947	1,163,077	18,127	9,274	67,299
1947: September	470,515	461,157	201,582	96,485	163,090	2,448	1,284	5,626
October	481,401	471,938	203,892	99,713	168,333	2,457	1,334	5,672
November	451,502	442,171	192,111	98,666	151,394	2,457	1,192	5,682
December	531,452	521,924	214,051	143,537	164,336	*2,462	1,336	5,730
1948: January	483,071	473,466	211,495	100,395	161,576	2,442	1,346	5,817
February	445,134	435,894	191,372	98,054	146,468	2,414	1,199	5,627
March	498,325	488,676	218,706	102,124	167,846	2,499	1,343	5,807
April	477,620	468,100	204,606	100,894	162,600	2,482	1,322	5,716
May	474,725	465,356	205,912	100,925	158,519	2,469	1,207	5,693
June	505,345	495,792	225,440	102,653	167,699	2,536	1,279	*5,738
July	528,437	518,639	223,968	121,677	172,994	2,600	1,301	5,897
August	546,551	536,652	230,147	122,320	184,186	2,695	1,390	5,813
September	546,993	537,165	231,840	123,040	182,285	2,662	1,453	5,713
	Continental United States							
1944 [6]	$7,628,017	$7,540,825	$5,553,166	$862,271	$1,125,388	$18,127	$8,878	$60,187
1947: September	430,555	421,857	169,441	96,138	156,278	2,448	1,248	5,002
October	443,408	434,545	173,717	99,356	161,472	2,457	1,297	5,109
November	414,020	405,485	162,219	98,313	144,953	2,457	1,154	4,924
December	*491,727	*482,884	*182,109	143,057	*157,718	*2,462	1,301	5,080
1948: January	443,259	434,366	179,395	100,052	154,919	2,442	1,309	5,142
February	408,614	399,975	161,996	97,703	140,276	2,414	1,165	5,060
March	456,878	447,901	185,284	101,765	160,852	2,499	*1,305	5,173
April	439,691	430,845	174,409	100,543	155,893	2,482	*1,287	5,077
May	434,657	426,011	174,209	100,570	151,232	2,469	1,174	5,003
June	461,406	452,529	189,974	102,306	160,249	2,536	1,242	5,099
July	487,057	478,016	191,686	121,263	165,067	2,600	1,263	5,178
August	504,080	494,839	197,058	121,906	175,875	2,695	1,351	5,155
September	504,399	495,228	198,642	122,606	173,980	2,662	1,414	5,095

[1] Data are from a series revised June 1947 to adjust pay rolls, which from July 1945 until December 1946 were reported for pay periods ending during the month, to cover the entire calendar month. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for Central Intelligence Agency are excluded starting July 1947.

[2] From 1939 through May 1943, pay rolls were reported for all areas monthly. Beginning June 1943, some agencies reported pay rolls for all areas and some reported pay rolls for the continental area only. Pay rolls for areas outside continental United States from June 1943 through November 1946 (except for the National Military Establishment for which these data were reported monthly during most of this period) were secured by multiplying employment in these areas (see footnote 2, table A–11, for derivation of the employment) by the average pay per person in March 1944, as revealed in a survey as of that date, adjusted for the salary increases given in July 1945 and July 1946. Beginning December 1946 pay rolls for areas outside the country are reported monthly by most agencies.

[3] See footnote 3, table A–11.

[4] See footnote 4, table A–11.

[5] Beginning July 1945, pay is included of clerks at third-class post offices who previously were hired on a contract basis and therefore were private employees and of fourth-class postmasters who previously were recompensed by the retention of a part of the postal receipts. Both these groups were placed on a regular salary basis in July 1945 by congressional action.

[6] Data are shown for 1944, instead of 1943 as in the other Federal tables, because pay rolls for employment in areas outside continental United States are not available prior to June 1943.

*Revised.

TABLE A–13: Total Government Employment and Pay Rolls in Washington, D. C., by Branch and Agency Group [1]

Year and month	Total government	District of Columbia Government	Federal						
			Total	Executive				Legislative	Judicial
				All agencies	Defense agencies [2]	Post Office Department [3]	All other agencies		
	Employment [4]								
1939	143,548	13,978	129,570	123,773	18,761	5,099	99,913	5,373	
1943	300,914	*15,874	285,040	278,363	144,319	8,273	125,771	6,171	
1947: September	221,862	18,074	203,788	196,033	64,651	7,120	124,262	7,184	
October	221,236	18,303	202,933	195,239	64,505	7,284	123,450	7,118	
November	221,481	18,381	203,100	195,448	64,548	7,281	123,619	7,068	
December	224,375	18,418	205,957	198,331	64,715	10,156	123,460	7,046	
1948: January	221,794	18,448	203,346	195,714	65,065	7,258	123,391	7,046	
February	224,517	18,625	205,892	198,201	65,543	7,235	125,423	7,101	
March	226,256	18,668	207,588	199,784	66,050	7,412	126,322	7,217	
April	227,629	18,628	209,001	201,227	66,635	7,396	127,196	7,186	
May	228,864	18,669	210,195	202,350	67,212	7,380	127,758	7,257	
June	229,526	18,848	210,678	202,782	67,392	7,387	127,803	7,308	
July	233,308	19,294	214,014	206,110	69,056	7,499	129,555	7,305	
August	234,252	18,881	215,371	207,438	70,217	7,486	129,735	7,341	
September	234,715	18,474	216,241	208,276	70,783	7,551	129,942	7,377	
	Pay rolls (in thousands)								
1939	$305,741	$25,226	$280,515	$264,541	$37,825	$12,524	$214,192	$14,765	$1,2
1943	737,792	32,884	704,908	685,510	352,007	20,070	313,433	17,785	1,6
1947: September	59,911	4,382	55,529	52,876	16,651	2,239	33,986	2,448	2
October	64,467	4,496	59,971	57,298	16,806	2,744	37,748	2,457	2
November	59,400	4,223	55,177	52,525	16,110	2,606	33,809	2,457	1
December	64,111	4,570	59,541	56,861	17,235	3,135	36,491	2,462	2
1948: January	63,295	4,499	58,796	56,141	16,656	2,776	36,709	2,442	2
February	57,991	4,281	53,710	51,099	15,910	2,165	33,024	2,414	1
March	65,336	4,518	60,818	58,104	17,900	2,340	37,864	2,499	2
April	62,987	4,495	58,492	55,799	16,324	2,277	37,198	2,482	2
May	63,492	4,422	59,070	56,400	18,045	2,234	36,121	2,469	2
June	66,658	4,561	62,097	59,350	19,250	2,300	37,800	2,536	2
July	67,208	3,461	63,747	60,931	20,234	2,651	38,045	2,600	2
August	71,359	3,480	67,879	64,956	21,114	2,695	41,147	2,695	2
September	72,307	4,576	67,731	64,840	21,070	2,709	41,061	2,662	2

[1] Data for the legislative and judicial branches and District of Columbia Government are reported to the Bureau of Labor Statistics. Data for the executive branch are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Include in December the temporary additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (2) include an upward adjustment to Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (3) exclude persons working without compensation or for $1 a year or month, included by the Civil Service Commission from June through November 1943; (4) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Beginning January 1942, data for the executive branch cover, in addition to the area inside the District of Columbia, the adjacent sections of Maryland and Virginia which are defined by the Bureau of the Census as in the metropolitan area. Data for Central Intelligence Agency are excluded starting August 1947 for employment and July 1947 for pay rolls.

[2] Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

[3] For ways in which data differ from published figures of the Civil Service Commission, see footnote 1.

[4] Yearly figures represent averages. Monthly figures represent (1) the number of regular employees in pay status on the first day of the month plus the number of intermittent employees who were paid during the preceding month for the executive branch, (2) the number of employees on the pay roll with pay during the pay period ending just before the first of the month for the legislative and judicial branches, and (3) the number of employees on the pay roll with pay during the pay period ending on or just before the last of the month for the District of Columbia Government.

*Revised.

TABLE A–14: Personnel and Pay in Military Branch of Federal Government [1]

[In thousands]

Year and month	Personnel (average for year or as of first of month) [2]					Type of pay				
	Total	Army and Air Forces [3]	Navy	Marine Corps	Coast Guard	Total	Pay rolls [4]	Mustering-out pay [5]	Family allowances [6]	Leave payments [7]
1939	345	192	124	19	10	$331,523	$331,523			
1943	8,944	6,733	1,744	311	156	11,181,079	10,148,745		$1,032,334	
1947: September	1,557	955	491	92	19	332,804	248,928	9,632	24,210	50,034
October	1,543	941	491	92	19	355,961	271,040	9,954	25,145	49,822
November	1,490	920	459	92	19	309,705	252,112	9,117	23,127	25,349
December	1,463	911	445	87	20	300,257	246,532	13,293	23,827	16,605
1948: January	1,422	898	421	83	20	300,241	250,953	13,465	23,454	12,369
February	1,419	905	414	80	20	281,423	240,493	11,838	23,566	5,526
March	1,422	909	413	80	20	285,011	242,969	13,050	24,997	3,995
April	1,417	906	412	79	20	285,210	247,452	9,751	25,414	2,593
May	1,419	916	403	80	20	*278,967	242,292	*9,057	25,736	1,882
June	1,439	930	407	82	20	277,368	243,239	5,756	26,476	1,898
July	1,463	940	420	84	20	276,590	246,422	2,516	26,353	1,299
August	1,514	979	430	86	21	278,234	244,547	3,955	27,756	1,976
September	1,548	1,009	432	86	21	292,490	251,747	9,365	28,143	3,235

[1] Except for Army personnel for 1939 which is from the Annual Report of the Secretary of War, all data are from reports submitted to the Bureau of Labor Statistics by the various military branches. Because of rounding, totals will not necessarily add to the sum of the items shown.

[2] Includes personnel on active duty, the missing, those in the hands of the enemy, and those on terminal leave through October 1, 1947, when lump-sum terminal-leave payments at time of discharge were started.

[3] Prior to March 1944, data include persons on induction furlough. Prior to June 1942 and after April 1945, Philippine Scouts are included.

[4] Pay rolls are for personnel on active duty; they include payment of personnel while on terminal leave through September 1947. For officers this applies to all prior periods and for enlisted personnel back to October 1, 1946, only. Beginning October 1, 1947, they include lump-sum terminal-leave payments made at time of discharge. Coast Guard pay rolls for all periods and Army pay rolls through April 1947 represent actual expenditures. Other data represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy and Coast Guard include cash payments for clothing-allowance balances in January, April, July, and October.

[5] Represents actual expenditures.

[6] Represents Government's contribution. The men's share is included in the pay rolls.

[7] Leave payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel discharged prior to September 1, 1946, for accrued and unused leave, and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds (representing face value, to which interest is added when bonds are cashed) and cash payments are included. Lump-sum payments for terminal leave, which were authorized by Public Law 350 of the 80th Congress, and which were started in October 1947, are excluded here and included under pay rolls.

*Revised.

B: Labor Turn-Over

TABLE B–1: Monthly Labor Turn-Over Rates (Per 100 Employees) in Manufacturing Industries, by Class of Turn-Over [1]

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accession:												
1948	4.6	3.9	4.0	4.0	4.1	5.7	4.7	[2] 5.0				
1947	6.0	5.0	5.1	5.1	4.8	5.5	4.9	5.3	5.9	5.5	4.8	3.6
1946	8.5	6.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	4.3
1943	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939 [3]	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8
Total separation:												
1948	4.3	4.2	4.5	4.7	4.3	4.5	4.4	[2] 5.1				
1947	4.9	4.5	4.9	5.2	5.4	4.7	4.6	5.3	5.9	5.0	4.0	3.7
1946	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	4.5
1943	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939 [3]	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit: [4]												
1948	2.6	2.5	2.8	3.0	2.8	2.9	2.9	[2] 3.4				
1947	3.5	3.2	3.5	3.7	3.5	3.1	3.1	4.0	4.5	3.6	2.7	2.3
1946	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	3.0
1943	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939 [3]	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1948	.4	.4	.4	.4	.3	.4	.4	[2] .4				
1947	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4
1946	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4
1943	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939 [3]	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: [5]												
1948	1.2	1.2	1.2	1.2	1.1	1.1	1.0	[2] 1.2				
1947	.9	.8	.9	1.0	1.4	1.1	1.0	.8	.9	.9	.8	.9
1946	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	1.0
1943	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939 [3]	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Miscellaneous, including military: [4]												
1948	.1	.1	.1	.1	.1	.1	.1	[2] .1				
1947	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1946	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	.1
1943	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6

[1] Month-to-month changes in total employment in manufacturing industries as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month, while the latter, for the most part, refer to a 1-week period ending nearest the 15th of the month. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered. Plants on strike are also excluded. See NOTE, table B–2.

[2] Preliminary figures.

[3] Prior to 1943, rates relate to wage earners only.

[4] Prior to September 1940, miscellaneous separations were included with quits.

[5] Including temporary, indeterminate (of more than 7 days' duration), and permanent lay-offs.

TABLE B–2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Industries [1]

Industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948
MANUFACTURING												
Durable goods	5.0	4.6	5.4	4.4	3.5	2.9	0.4	0.4	1.3	0.9	0.2	0.2
Nondurable goods	4.9	4.8	4.7	4.2	3.3	2.8	.3	.3	1.0	1.0	.1	.1
Durable goods												
Iron and steel and their products	4.7	4.1	4.5	3.4	3.5	2.6	.4	.3	.4	.3	.2	.2
Blast furnaces, steel works, and rolling mills	3.7	3.6	4.0	2.8	3.3	2.3	.3	.2	.1	.1	.3	.2
Gray-iron castings	6.2	5.0	5.8	5.0	4.4	3.7	.7	.7	.6	.5	.1	.1
Malleable-iron castings	6.4	5.4	6.0	6.7	5.0	4.5	.5	.6	.3	1.4	.2	.2
Steel castings	5.8	4.5	4.7	4.3	3.7	3.4	.5	.6	.4	.1	.1	.2
Cast-iron pipe and fittings	4.6	3.9	3.4	4.1	3.0	3.4	.2	.3	.1	.3	.1	.2
Tin cans and other tinware	11.0	10.0	9.1	4.9	6.6	3.6	1.7	.9	.7	.2	.1	.1
Wire products	3.4	3.8	3.7	3.0	2.2	2.3	.4	.3	.9	.2	.2	.2
Cutlery and edge tools	5.4	2.8	3.4	3.4	2.2	2.1	.3	.5	.8	.7	.1	.1
Tools (except edge tools, machine tools, files, and saws)	3.0	2.2	3.6	2.7	2.4	1.8	.4	.3	.8	.5	(3)	
Hardware	3.8	3.7	4.5	4.8	3.6	3.2	.5	.4	.3	1.0	.1	.2
Stoves, oil burners, and heating equipment	7.2	5.9	5.1	4.3	3.7	3.0	.4	.4	.8	.8	.2	.1
Steam and hot-water heating apparatus and steam fittings	5.5	3.2	4.3	4.7	3.0	3.2	.7	.4	.6	1.0	(3)	.1
Stamped and enameled ware and galvanizing	5.2	5.9	6.3	4.7	4.2	3.4	.5	.4	1.4	.7	.2	.2
Fabricated structural-metal products	5.4	3.8	4.4	3.4	2.4	2.2	.4	.4	1.5	.7	.1	.1
Bolts, nuts, washers, and rivets	3.0	2.2	3.1	2.9	2.3	1.8	.4	.2	.2	.7	.2	.2
Forgings, iron and steel	5.1	3.6	3.8	3.0	2.5	1.9	.5	.3	.6	.7	.2	.1
Electrical machinery	3.5	2.6	3.4	3.0	2.2	1.7	.2	.2	.9	1.0	.1	.1
Electrical equipment for industrial use	1.9	2.0	2.0	2.2	1.2	1.2	.1	.1	.5	.7	.2	.2
Radios, radio equipment, and phonographs	6.4	3.8	4.4	3.9	3.0	2.5	.5	.3	.8	1.0	.1	.1
Communication equipment, except radios	1.8	1.1	2.7	2.3	2.0	1.3	.1	.1	.5	.8	.1	.1
Machinery, except electrical	3.3	3.0	4.2	3.3	2.6	2.1	.3	.3	1.1	.7	.2	.2
Engines and turbines	4.9	4.0	6.0	4.1	2.1	2.0	.4	.4	3.3	1.6	.2	.1
Agricultural machinery and tractors	3.4	3.7	6.1	4.3	3.3	3.0	.3	.4	2.2	.6	.3	.1
Machine tools	2.2	2.4	2.5	2.2	1.6	1.4	.3	.2	.5	.4	.1	.2
Machine-tool accessories	3.2	2.5	3.6	2.7	2.0	1.6	.4	.2	1.1	.8	.1	.1
Metalworking machinery and equipment, not elsewhere classified	3.0	3.0	4.0	2.5	2.8	2.0	.4	.3	.6	.1	.2	.1
General industrial machinery, except pumps	3.7	3.0	3.6	2.9	2.7	2.0	.4	.3	.3	.5	.2	.1
Pumps and pumping equipment	2.6	2.2	3.4	3.4	2.0	1.4	.4	.3	.9	1.6	.1	.1
Transportation equipment, except automobiles	6.4	6.6	6.7	6.5	2.7	2.5	.4	.4	3.4	3.5	.2	.1
Aircraft	5.9	5.7	3.8	4.9	2.9	2.8	.3	.3	.5	1.6	.1	.2
Aircraft parts, including engines	3.1	3.1	2.1	2.7	1.4	1.4	.2	.3	.5	.9	(3)	.1
Shipbuilding and repairs	8.8	9.7	12.9	12.1	2.7	2.7	.6	.7	9.5	8.6	.1	.1
Automobiles	5.6	5.7	8.1	5.0	3.8	3.3	.6	.5	3.5	1.0	.2	.2
Motor vehicles, bodies, and trailers	5.5	5.6	9.1	5.1	3.9	3.6	.5	.5	4.5	.8	.2	.2
Motor-vehicle parts and accessories	5.9	5.9	5.9	5.1	3.6	2.6	.6	.7	1.5	1.6	.2	.2
Nonferrous metals and their products	5.0	4.1	4.3	3.6	2.9	2.4	.5	.4	.8	.7	.1	.1
Primary smelting and refining, except aluminum and magnesium	3.5	3.0	3.4	2.5	2.1	1.6	.7	.5	.3	.2	.3	.2
Rolling and drawing of copper and copper alloys	3.7	3.3	2.5	2.2	1.8	1.8	.4	.2	.2	.1	.1	.1
Lighting equipment	(4)	4.9	(4)	3.3	(4)	2.2	(4)	.5	(4)	.6	(4)	(3)
Nonferrous-metal foundries, except aluminum and magnesium	6.7	4.3	4.9	3.8	3.7	2.9	.6	.4	.5	.3	.1	.2
Lumber and timber basic products	7.1	7.1	7.1	6.3	5.8	5.1	.4	.4	.8	.7	.1	.1
Sawmills	7.4	6.3	7.1	5.4	5.9	4.5	.5	.4	.7	.4	(3)	.1
Planing and plywood mills	5.2	4.5	6.1	4.3	4.6	2.9	.3	.3	1.1	.9	.1	.2
Furniture and finished lumber products	7.7	6.1	6.6	6.7	5.1	4.4	.6	.5	.8	1.7	.1	.1
Furniture, including mattresses and bedsprings	8.0	6.3	6.6	6.7	5.2	4.4	.7	.5	.6	1.7	.1	.1
Stone, clay, and glass products	4.7	4.2	4.6	3.7	3.0	2.5	.4	.4	1.0	.6	.2	.2
Glass and glass products	5.1	4.0	5.4	3.6	2.3	2.0	.3	.2	2.6	1.2	.2	.2
Cement	4.2	4.0	5.0	3.8	3.8	3.0	.7	.5	.3	.1	.2	.2
Brick, tile, and terra cotta	5.8	5.3	5.2	4.7	4.3	3.6	.5	.8	.2	.2	.2	.1
Pottery and related products	6.4	5.4	4.7	3.7	3.6	3.0	.5	.4	.5	.2	.1	.1

See footnotes at end of table.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Industries [1]—Continued

Industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948	Aug.[2] 1948	July 1948
MANUFACTURING—Continued												
Nondurable goods												
Textile-mill products	4.3	3.7	4.6	4.3	3.2	2.8	0.3	0.3	1.0	1.0	0.1	0.2
Cotton	4.9	4.1	4.9	4.7	3.7	3.4	.4	.4	.7	.8	.1	.1
Silk and rayon goods	4.5	4.2	4.4	4.2	3.0	3.0	.3	.3	.9	.8	.2	.1
Woolen and worsted, except dyeing and finishing	3.3	4.5	4.5	3.7	2.3	1.9	.3	.2	1.7	1.3	.2	.3
Hosiery, full-fashioned	3.8	3.1	3.5	2.7	3.1	2.2	.2	.2	.1	.2	.1	.1
Hosiery, seamless	5.2	3.8	7.5	6.2	3.8	3.2	.1	.1	3.4	2.4	.2	.5
Knitted underwear	3.2	3.2	5.6	4.7	3.3	3.0	.3	.3	1.9	1.3	.1	.1
Dyeing and finishing textiles, including woolen and worsted	2.3	2.0	3.3	2.7	1.6	1.4	.3	.4	1.3	.7	.1	.2
Apparel and other finished textile products	6.1	5.4	5.7	4.6	4.5	3.4	.3	.2	.8	1.0	.1	[3]
Men's and boys' suits, coats, and overcoats	4.3	4.6	3.9	3.7	3.4	2.3	.2	.1	.2	1.3	.1	[3]
Men's and boys' furnishings, work clothing, and allied garments	7.3	4.3	6.9	4.3	5.3	3.9	.2	.1	1.4	.3	[3]	[3]
Leather and leather products	4.5	4.7	4.8	4.3	3.8	3.4	.3	.2	.6	.6	.1	.1
Leather	3.3	3.2	2.9	2.9	2.0	2.0	.2	.2	.6	.6	.1	.1
Boots and shoes	4.8	4.9	5.0	4.5	4.1	3.7	.3	.2	.5	.5	.1	.1
Food and kindred products	6.7	7.1	6.8	6.5	4.0	3.7	.5	.7	2.2	1.9	.1	.2
Meat products	5.7	7.2	8.3	7.6	4.2	3.5	.7	.9	3.2	2.9	.2	.3
Grain-mill products	7.5	8.7	6.2	5.4	5.0	4.1	.5	.6	.6	.6	.1	.1
Tobacco manufactures	6.6	3.8	4.5	3.6	3.7	3.0	.2	.2	.5	.3	.1	.1
Paper and allied products	4.0	3.9	3.8	3.1	3.0	2.4	.4	.3	.3	.3	.1	.1
Paper and pulp	3.2	3.3	3.3	2.6	2.6	1.9	.3	.3	.3	.3	.1	.1
Paper boxes	6.2	5.1	5.1	4.3	4.2	3.4	.5	.4	.3	.3	.1	.2
Chemicals and allied products	2.2	2.2	2.4	2.0	1.6	1.3	.3	.2	.4	.4	.1	.1
Paints, varnishes, and colors	2.8	2.6	3.0	2.3	2.2	1.5	.3	.3	.4	.4	.1	.1
Rayon and allied products	1.6	1.9	1.5	1.3	1.1	1.0	.1	.1	.2	.1	.1	.1
Industrial chemicals, except explosives	2.4	2.2	2.7	2.2	1.8	1.4	.4	.3	.4	.4	.1	.1
Products of petroleum and coal	1.3	1.5	1.2	1.1	.9	.7	.1	.1	.1	.1	.1	.2
Petroleum refining	1.0	1.3	1.0	.9	.7	.5	.1	.1	.1	.1	.1	.2
Rubber products	3.5	2.9	3.0	2.8	2.2	2.0	.2	.2	.4	.4	.2	.2
Rubber tires and inner tubes	2.1	2.3	2.0	2.1	1.4	1.4	.1	.2	.3	.3	.2	.2
Rubber footwear and related products	6.9	3.6	4.4	3.2	3.7	2.7	.2	.1	.3	.1	.2	.3
Miscellaneous rubber industries	4.2	3.9	4.0	4.1	2.8	2.9	.4	.3	.7	.7	.1	.2
Miscellaneous industries	3.6	4.0	2.7	2.7	1.9	1.7	.2	.2	.4	.7	.2	.1
NONMANUFACTURING												
Metal mining	5.6	4.7	5.4	5.2	4.5	4.1	.6	.4	.2	.4	.1	.3
Iron-ore	3.3	2.4	3.4	2.8	3.1	2.3	.1	.1	[3]	[3]	.2	.4
Copper-ore	[4]	5.3	[4]	5.5	[4]	4.8	[4]	.3	[4]	.2	[4]	.2
Lead- and zinc-ore	12.0	7.2	10.7	8.1	8.0	5.1	1.9	1.0	.7	1.9	.1	.1
Coal mining:												
Anthracite	1.7	1.7	1.8	2.0	1.5	1.6	[3]	[3]	.2	.3	.1	.1
Bituminous	3.6	4.4	3.4	3.4	2.8	3.0	.1	.1	.4	.2	.1	.1
Public utilities:												
Telephone	[4]	3.2	[4]	2.2	[4]	1.9	[4]	.1	[4]	.1	[4]	.1
Telegraph	[4]	1.8	[4]	2.1	[4]	1.4	[4]	.1	[4]	.5	[4]	.1

[1] Since January 1943 manufacturing firms reporting labor turn-over information have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products. Labor turn-over data, beginning in January 1943, refer to wage and salary workers. Employment information for wage and salary workers is available for major manufacturing industry groups (table A-3); for individual industries these data refer to production workers only (table A-5).

[2] Preliminary figures.

[3] Less than 0.05.

[4] Not available.

NOTE: Explanatory notes outlining briefly the concepts, sources, size of the reporting sample, and methodology used in preparing the data presented in tables B–1 and B–2 are contained in the Bureau's monthly mimeographed release, "Labor Turn-Over," which is available upon request.

C: Earnings and Hours

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries[1]

MANUFACTURING

Year and month	All manufacturing			Durable goods			Nondurable goods			Iron and steel and their products								
										Total: Iron and steel and their products			Blast furnaces, steel works, and rolling mills			Gray-iron and semi-steel castings		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$23.86	37.7	63.3	$26.50	38.0	69.8	$21.78	37.4	58.2	$27.52	37.2	73.9	$29.88	35.3	84.5	$25.93	37.1	69
1941: January	26.64	39.0	68.3	30.48	40.7	74.9	22.75	37.3	61.0	31.07	40.4	76.9	33.60	38.7	86.9	30.45	41.2	74
1947: August	49.17	39.8	123.6	52.46	40.0	131.2	45.78	39.5	115.8	54.53	39.6	137.6	58.25	39.2	148.8	53.77	40.3	133
September	50.47	40.4	124.9	54.06	40.6	133.1	46.80	40.2	116.5	56.21	40.3	139.6	58.96	39.0	151.3	56.86	41.7	137
October	51.05	40.6	125.8	54.69	40.9	133.7	47.29	40.2	117.5	56.61	40.5	139.7	58.56	39.0	150.2	56.66	41.9	136
November	51.29	40.4	126.8	54.86	40.7	134.6	47.56	40.1	118.5	56.93	40.5	140.4	59.52	39.4	151.0	55.51	40.9	133
December	52.69	41.2	127.8	56.48	41.7	135.4	48.72	40.8	119.6	58.13	41.2	141.2	60.01	39.5	151.9	58.16	42.5	136
1948: January	52.07	40.5	128.5	55.46	40.9	135.5	48.45	40.0	121.0	57.43	40.6	141.4	60.58	39.5	153.3	57.31	41.6	137
February	51.75	40.2	128.7	54.77	40.5	135.2	48.56	39.9	121.7	56.99	40.4	140.9	59.74	39.5	151.3	57.24	41.2	139
March	52.07	40.4	128.9	55.25	40.9	135.2	48.66	39.9	122.0	57.28	40.6	141.2	59.26	39.4	151.0	58.47	41.8	140
April	51.79	40.1	129.2	54.96	40.5	135.7	48.33	39.6	122.0	56.49	39.9	141.6	58.37	38.6	151.3	56.39	40.2	140
May	51.86	39.9	130.1	54.81	40.1	136.6	48.65	39.6	123.0	57.39	40.3	142.3	60.54	39.9	151.5	55.15	39.3	140
June	52.85	40.2	131.6	56.13	40.5	138.5	49.37	39.8	124.2	57.70	40.3	143.1	59.54	39.3	151.5	57.85	40.7	142
July	53.01	39.8	133.3	56.33	40.0	140.8	49.50	39.5	125.2	57.67	39.6	145.7	60.37	38.7	155.9	56.66	39.8	142
August	54.12	40.1	134.9	58.34	40.7	143.2	49.80	39.5	126.2	60.64	40.4	150.2	65.10	39.6	164.2	58.08	40.4	143

Iron and steel and their products—Continued

Year and month	Malleable-iron castings			Steel castings			Cast-iron pipe and fittings			Tin cans and other tinware			Wirework			Cutlery and edge tools		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$24.16	36.0	67.1	$27.97	36.9	75.9	$21.33	36.4	58.1	$23.61	38.8	61.1	$25.96	38.1	68.3	$23.11	39.1	60
1941: January	28.42	40.2	70.7	32.27	41.4	78.0	25.42	40.5	62.6	25.31	39.8	63.9	28.27	39.7	71.2	25.90	40.5	64
1947: August	51.68	37.7	137.2	54.71	39.1	139.9	46.79	39.9	118.4	53.57	42.5	125.9	51.45	39.6	130.0	46.56	40.2	116
September	55.66	40.3	139.0	56.50	39.9	141.5	48.34	40.5	118.4	55.28	43.4	127.5	53.70	40.3	132.3	49.20	42.2	117
October	57.73	41.2	141.1	58.15	40.7	142.9	49.60	41.4	119.8	53.74	42.5	127.0	54.35	41.0	132.6	49.57	42.1	117
November	58.06	41.2	141.1	58.73	41.0	143.4	48.93	40.7	120.1	52.16	41.1	126.8	56.10	42.0	133.5	50.48	42.3	119
December	59.18	41.8	141.4	60.05	41.6	144.3	50.98	42.2	120.6	53.92	42.5	126.5	57.83	42.6	135.6	50.26	42.0	119
1948: January	59.03	41.5	142.0	59.48	41.1	144.6	49.67	40.4	122.5	51.45	40.7	126.3	56.36	41.8	134.7	49.91	41.8	119
February	57.44	40.8	140.5	58.52	40.5	144.5	50.42	40.3	125.0	50.44	40.1	126.3	55.47	41.1	134.9	50.09	41.6	119
March	57.79	40.8	141.4	59.88	41.3	145.0	50.21	40.1	124.8	49.76	39.8	125.1	55.70	41.0	135.5	50.20	41.5	120
April	56.77	39.8	142.4	60.13	41.2	145.8	48.52	38.5	125.8	49.65	39.8	125.0	54.96	40.4	136.0	49.90	41.4	120
May	57.21	40.4	141.5	60.49	41.3	146.3	51.07	40.2	127.1	50.98	40.2	127.3	55.11	40.5	136.7	50.22	41.2	121
June	57.46	40.1	143.0	61.60	41.7	147.9	52.74	40.9	128.8	53.04	41.0	129.5	55.82	40.6	137.3	50.36	41.4	121
July	57.37	39.9	144.1	58.71	40.0	146.7	51.94	40.5	128.1	56.99	42.0	136.2	57.36	40.0	142.2	50.05	40.4	123
August	59.44	40.2	147.2	61.79	41.4	149.2	52.84	40.6	130.2	57.04	41.6	136.7	58.11	40.3	144.3	51.83	41.5	124

Iron and steel and their products—Continued

Year and month	Tools (except edge tools, machine tools, files, and saws)			Hardware			Plumbers' supplies			Stoves, oil burners, and heating equipment, not elsewhere classified			Steam and hot-water heating apparatus and steam fittings			Stamped and enameled ware and galvanizing		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$24.49	39.7	61.8	$23.13	38.9	59.3	$25.80	38.2	67.6	$25.25	38.1	66.6	$26.19	37.6	69.7	$23.92	38.1	62
1941: January	29.49	44.7	66.2	25.24	40.9	62.1	27.13	39.0	69.6	26.07	38.7	67.8	30.98	42.5	73.2	26.32	39.4	66
1947: August	50.10	41.0	122.1	48.19	40.2	121.0	49.93	38.9	128.5	49.75	39.0	127.5	50.60	38.1	132.9	50.40	39.5	127
September	52.39	42.2	124.3	50.43	41.3	122.2	52.38	40.0	131.0	53.32	40.9	130.5	54.54	40.4	135.2	51.72	39.9	129
October	52.47	42.1	124.8	51.22	41.7	122.8	54.65	40.7	134.3	55.15	41.6	132.6	55.46	41.1	135.0	52.40	40.4	129
November	52.97	42.2	125.5	51.58	41.6	123.3	56.42	41.4	136.4	53.39	40.1	133.1	57.64	41.8	138.0	52.81	40.5	130
December	54.44	43.0	126.6	52.55	42.2	124.5	57.00	41.6	137.0	56.22	42.0	133.9	58.66	42.2	138.9	54.72	41.5	132
1948: January	54.24	42.6	127.3	53.29	42.4	125.6	55.61	40.8	136.5	54.24	40.3	134.5	54.87	40.3	136.3	53.65	40.7	131
February	54.02	42.3	127.8	52.79	42.3	124.9	55.26	40.4	136.7	54.59	40.2	135.8	57.07	41.3	138.3	52.42	40.0	131
March	54.68	42.6	128.7	52.63	42.0	125.2	56.54	41.2	137.4	54.12	40.1	135.2	56.53	40.9	138.0	52.78	40.3	131
April	54.15	41.9	129.3	52.05	41.6	125.1	56.27	40.6	138.6	54.34	39.9	136.3	56.13	40.7	137.8	52.93	40.1	132
May	54.01	41.6	129.9	50.84	40.4	125.3	56.93	41.0	138.8	54.13	39.7	136.6	56.90	40.7	139.6	53.75	40.3	133
June	54.96	42.1	130.8	51.66	40.6	127.0	56.51	40.4	140.1	55.95	40.2	139.2	57.68	40.7	141.8	53.54	40.2	133
July	54.11	41.2	131.4	49.64	38.7	128.4	56.48	40.2	140.5	55.26	39.7	139.2	59.42	41.0	144.8	52.62	38.6	136
August	56.53	42.2	134.2	52.67	40.6	129.8	58.12	40.7	142.9	57.04	40.5	141.1	59.68	40.7	146.6	54.80	39.8	137

See footnotes at end of table.

ABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Iron and steel and their products—Continued

Year and month	Fabricated structural and ornamental metalwork			Metal doors, sash, frames, molding, and trim			Bolts, nuts, washers, and rivets			Forgings, iron and steel			Screw-machine products and wood screws			Steel barrels, kegs, and drums		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$27.95	38.5	72.7	-------	-------	-------	$26.04	37.7	69.0	$29.45	38.4	76.7	-------	-------	-------	-------	-------	-------
1941: January	31.01	41.8	74.3	-------	-------	-------	29.58	41.9	70.6	36.75	45.0	81.8	-------	-------	-------	-------	-------	-------
1947: August	55.64	41.7	133.4	$54.12	41.2	131.5	52.45	40.0	131.0	57.42	38.7	148.4	$52.38	40.8	128.4	$53.38	40.3	132.4
September	55.87	41.6	134.4	55.75	42.0	132.8	53.08	40.2	131.7	62.38	40.9	152.6	53.91	41.9	128.5	55.08	40.7	135.3
October	57.60	42.6	135.2	56.48	42.0	134.4	56.52	42.1	133.9	65.54	41.8	156.9	55.02	42.1	130.6	52.13	39.4	132.2
November	57.31	42.0	136.8	57.11	42.7	133.9	55.98	41.3	135.3	65.00	41.4	157.2	54.55	41.6	131.1	53.81	40.8	132.0
December	58.81	42.7	137.8	58.97	43.5	135.4	57.79	42.5	135.9	67.20	42.2	159.1	56.77	43.0	131.9	57.08	42.5	134.4
1948: January	55.76	41.1	135.6	56.49	42.0	134.6	55.68	40.6	136.9	65.74	41.6	158.1	56.54	42.7	132.4	55.31	41.0	135.6
February	55.31	40.9	135.3	55.88	41.7	134.2	57.38	42.0	136.4	65.51	41.4	158.3	56.62	42.8	132.4	51.35	38.2	134.3
March	56.15	41.1	137.1	57.35	41.1	138.5	59.20	43.1	137.2	64.42	40.8	157.9	56.99	42.9	132.7	53.16	39.5	134.4
April	55.77	40.8	136.5	57.97	41.2	139.2	58.44	42.5	137.5	63.10	40.0	157.7	56.30	42.4	132.7	53.49	39.2	136.1
May	57.16	41.2	138.8	58.55	41.0	141.2	57.88	42.2	137.1	62.64	40.0	156.6	56.06	42.1	133.1	55.31	40.4	136.9
June	57.84	41.2	139.5	61.49	42.7	143.9	58.76	42.3	138.6	64.74	40.7	158.0	55.65	41.9	132.8	55.41	40.5	136.9
July	55.39	39.4	139.8	57.93	40.4	143.5	57.37	41.5	138.3	63.44	40.0	158.5	55.68	41.3	135.0	53.24	38.6	138.1
August	59.92	41.1	144.7	61.71	41.9	147.3	60.97	42.5	144.0	66.59	40.4	164.7	56.35	41.3	136.6	58.39	39.9	146.2

Iron and steel and their products—Continued / Electrical machinery / Machinery, except electrical

Year and month	Firearms			Electrical machinery: Total			Electrical equipment			Radios and phonographs			Communication equipment			Machinery, except electrical: Total		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$27.28	41.3	66.0	$27.09	38.6	70.2	$27.95	38.7	72.2	$22.34	38.5	58.1	$28.74	38.3	75.1	$29.27	39.3	74.6
1941: January	35.09	48.6	72.2	31.84	42.4	75.1	33.18	43.4	76.5	24.08	38.2	63.2	32.47	41.4	78.4	34.36	44.0	78.1
1947: August	56.65	40.8	138.9	51.53	39.2	131.4	53.50	39.6	135.0	44.29	38.0	116.7	51.18	38.9	131.6	55.74	40.5	137.7
September	58.51	41.8	140.1	53.46	40.4	132.5	55.05	40.5	136.0	47.24	40.0	118.2	53.66	40.2	133.5	57.36	41.1	139.5
October	57.90	41.2	140.5	54.10	40.6	133.1	55.35	40.6	136.4	47.98	40.2	119.3	55.81	41.4	135.0	57.87	41.3	140.0
November	58.53	41.1	142.4	54.32	40.6	133.9	55.76	40.6	137.4	47.61	39.8	119.7	55.94	41.4	135.2	57.92	41.2	140.4
December	60.01	42.0	142.9	55.34	41.1	134.6	56.99	41.2	138.4	48.59	40.4	120.3	56.15	41.7	134.8	59.67	42.2	141.3
1948: January	59.88	41.8	143.4	54.82	40.5	135.2	56.77	40.8	139.1	47.56	39.6	120.2	54.64	40.5	135.1	59.13	41.8	141.5
February	60.80	42.1	144.6	54.50	40.4	134.8	56.11	40.6	138.2	47.00	39.2	120.0	55.83	41.1	135.9	58.65	41.4	141.7
March	62.33	42.7	146.0	54.41	40.3	135.0	56.23	40.5	138.8	47.00	39.2	119.9	54.78	40.5	135.5	59.12	41.6	142.1
April	61.16	41.8	146.3	53.86	39.9	135.0	55.70	40.2	138.7	47.01	39.1	120.1	53.49	39.6	135.3	59.30	41.4	143.1
May	61.42	41.9	146.6	53.70	39.6	135.7	55.41	39.9	139.0	46.97	38.8	121.1	53.59	39.3	136.4	59.33	41.2	144.1
June	63.10	42.1	148.9	54.86	40.0	137.2	56.67	40.3	140.8	48.10	39.1	122.9	54.06	39.7	136.3	60.50	41.4	146.1
July	63.06	42.4	148.9	55.46	39.4	140.7	57.24	39.5	144.9	49.45	39.7	124.7	53.82	38.8	138.7	59.93	40.6	147.5
August	61.73	42.1	146.8	57.47	39.9	143.9	59.20	40.0	147.9	50.37	39.3	127.6	57.44	40.2	142.9	61.36	40.9	149.9

Machinery, except electrical—Continued

Year and month	Machinery and machine-shop products			Engines and turbines			Tractors			Agricultural machinery, excluding tractors			Machine tools			Machine-tool accessories		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$28.76	39.4	73.0	$28.67	37.4	76.7	$32.13	38.3	83.9	$26.46	37.0	71.6	$32.25	42.9	75.2	$31.78	40.9	77.7
1941: January	34.00	43.7	77.7	36.50	44.1	82.7	36.03	41.5	86.8	29.92	39.5	75.7	40.15	50.4	79.7	37.90	50.0	75.8
1947: August	55.07	40.9	135.3	61.34	40.9	151.0	57.67	40.0	144.3	56.29	40.3	139.2	57.77	41.4	139.4	57.43	39.9	144.7
September	56.41	41.3	137.0	60.16	40.5	149.4	59.08	40.7	145.0	57.97	40.6	141.7	58.69	41.8	140.5	61.16	41.2	148.6
October	56.75	41.3	137.4	58.72	39.6	148.9	60.17	41.1	146.5	58.36	40.9	143.9	59.25	42.1	140.8	61.42	41.4	148.2
November	57.03	41.4	138.1	62.04	41.2	151.6	60.13	41.1	146.4	55.91	39.6	141.5	59.53	41.9	141.2	61.30	41.1	149.4
December	59.22	42.7	139.1	61.14	40.5	151.9	60.24	41.3	145.9	57.85	40.6	142.4	61.34	43.1	142.4	63.47	42.4	149.7
1948: January	58.33	42.0	138.9	62.79	41.3	152.9	60.10	41.1	146.2	57.84	40.4	143.3	59.64	42.0	142.0	63.58	42.2	150.8
February	58.11	41.8	139.2	62.66	41.6	152.7	59.40	40.6	146.4	57.80	40.4	143.2	60.54	42.3	143.2	63.59	42.2	150.8
March	58.29	41.8	139.5	63.31	41.6	152.5	59.43	40.6	146.4	59.55	41.0	145.1	60.58	42.3	143.3	62.30	41.8	149.1
April	58.57	41.6	140.8	62.47	41.0	153.0	60.08	39.4	152.6	58.87	40.5	145.5	60.29	42.0	143.7	63.50	42.0	151.3
May	59.05	41.6	141.8	63.46	41.2	154.3	54.12	35.5	152.6	59.44	40.7	146.1	60.63	42.0	144.3	63.19	41.8	151.4
June	59.51	41.6	143.2	63.59	40.2	158.1	61.83	40.8	151.6	61.31	41.1	149.3	61.75	42.0	146.9	62.23	41.4	150.4
July	58.81	40.7	144.4	61.53	38.8	158.8	63.30	41.1	154.1	60.22	40.0	150.4	60.90	41.4	146.9	62.71	41.3	151.8
August	60.73	41.3	147.0	64.28	40.3	160.2	65.84	41.7	157.9	60.37	39.7	152.9	62.60	41.9	148.4	65.17	41.4	157.4

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

MANUFACTURING—Continued

Machinery, except electrical—Continued

Year and month	Textile machinery			Typewriters			Cash registers; adding, and calculating machines			Washing machines, wringers, and driers, domestic			Sewing machines, domestic and industrial			Refrigerators and frigeration ment		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earn- ings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$26.19	39.8	66.0	$23.98	37.3	64.3	$30.38	37.2	82.1									
1941: January	30.13	44.6	67.7	26.40	39.1	67.5	34.78	41.4	84.6									
1947: August	51.91	40.2	129.1	51.22	40.5	126.5	59.52	40.2	148.7	$52.82	40.1	131.6	$56.35	40.0	140.9	$52.22	38.5	13
September	56.08	42.2	132.9	51.91	40.6	128.0	63.21	42.1	151.3	54.17	41.0	132.0	60.72	42.0	145.4	54.18	39.5	13
October	55.77	42.1	132.5	54.04	42.0	128.8	63.82	42.3	152.3	57.13	42.4	134.6	62.27	42.5	146.9	56.33	40.7	13
November	56.88	42.1	135.5	55.54	42.5	130.6	63.29	42.1	151.8	57.96	42.7	135.8	62.17	42.4	146.5	54.41	39.8	13
December	58.56	43.1	135.8	55.89	42.9	130.1	65.67	42.9	153.7	60.42	43.7	138.4	63.21	42.9	147.2	57.05	41.2	13
1948: January	59.21	43.1	137.4	55.59	42.6	130.5	65.39	42.4	155.7	58.28	42.6	136.9	62.74	42.4	147.6	57.62	41.6	13
February	59.50	42.8	139.0	55.68	42.4	131.2	64.11	41.6	155.4	57.69	41.8	138.2	63.14	42.8	147.6	52.55	38.1	13
March	61.40	43.7	140.6	54.62	42.0	130.1	65.30	42.2	156.1	56.38	41.2	137.0	63.90	43.0	148.3	55.51	39.9	13
April	61.01	43.5	140.3	54.63	42.0	130.1	65.62	42.1	157.3	58.15	42.1	138.3	62.59	42.3	147.2	55.99	40.2	13
May	61.28	43.3	141.7	53.31	41.2	129.4	64.55	41.5	157.0	57.39	41.3	139.0	64.89	41.8	155.1	56.72	40.5	14
June	62.53	43.3	144.3	53.75	41.2	130.5	66.43	41.5	161.4	59.29	41.8	141.7	65.99	42.5	155.3	59.47	40.5	14
July	60.61	42.1	144.0	54.62	41.5	131.7	67.45	41.5	163.9	57.05	39.5	144.5	65.19	41.5	157.1	57.22	38.6	14
August	62.97	42.3	148.7	52.78	40.6	130.0	66.52	41.0	163.5	61.27	41.2	148.6	68.04	43.1	157.8	58.44	38.7	13

Transportation equipment, except automobiles

Year and month	Total: Transportation equipment, except automobiles			Locomotives			Cars, electric- and steam-railroad			Aircraft and parts, excluding aircraft engines			Aircraft engines			Shipbuilding and boatbuilding		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$30.51	38.9	78.5	$28.33	36.7	77.1	$26.71	36.0	74.1	$30.34	41.5	74.5	$36.58	44.1	83.5	$31.91	38.0	83.
1941: January	35.69	43.1	82.8	34.79	42.8	81.4	29.57	38.5	76.8	34.13	44.7	77.6	42.16	47.2	89.2	37.69	42.0	89.
1947: August	55.75	39.6	140.6	61.75	40.6	152.2	51.89	38.6	134.3	55.30	40.0	138.1	56.58	39.2	144.3	56.93	39.3	144.
September	56.54	39.7	142.4	64.69	41.3	156.7	55.03	39.9	137.8	54.44	39.3	138.6	58.43	40.0	146.0	57.71	39.5	146.
October	58.07	40.4	143.7	62.32	40.6	153.4	58.09	41.4	140.4	56.01	40.2	139.5	59.19	40.5	146.1	59.31	39.8	149.
November	56.42	38.6	146.2	61.64	39.8	154.9	57.61	40.4	142.5	55.48	39.3	141.3	57.52	39.4	146.1	55.20	36.1	152.
December	59.79	40.8	146.5	63.63	40.7	156.5	59.84	41.4	144.7	57.12	40.6	140.6	60.39	41.2	146.5	61.74	40.5	152.
1948: January	59.56	40.3	147.9	62.34	40.1	155.3	58.51	40.7	143.9	55.53	39.4	140.8	59.30	40.6	146.1	64.05	40.9	156.
February	58.67	39.6	148.2	61.01	39.2	155.5	58.02	40.2	144.2	56.13	39.9	140.6	58.29	40.1	145.2	61.54	38.9	158.
March	59.40	40.3	147.2	63.46	40.2	157.9	58.90	40.9	143.9	56.71	40.1	141.4	59.53	40.6	146.7	62.07	40.3	153.
April	59.89	40.5	147.8	64.96	40.5	160.4	58.70	40.9	143.7	57.75	40.6	142.1	60.33	40.5	149.1	62.04	40.2	154.
May	59.30	40.0	148.1	64.57	40.1	161.0	58.07	40.2	144.6	57.74	40.4	142.8	61.02	40.9	149.4	60.40	39.4	153.
June	59.27	39.8	148.9	64.58	39.7	162.6	58.46	39.9	146.7	57.99	40.4	143.6	62.14	40.6	153.2	59.76	39.2	152.
July	58.88	39.2	150.1	64.00	38.4	166.5	56.19	38.3	146.6	57.80	39.9	144.7	64.79	40.6	159.4	59.49	38.8	153.
August	60.41	39.6	152.4	64.76	38.7	167.4	62.14	40.7	152.8	59.82	40.5	147.3	65.11	41.1	158.3	58.61	37.7	155.

Year and month	Transportation equipment, except automobiles—Con.			Automobiles			Nonferrous metals and their products											
	Motorcycles, bicycles, and parts						Total: Nonferrous metals and their products			Smelting and refining, primary, of nonferrous metals			Alloying; and rolling and drawing of nonferrous metals, except aluminum			Clocks and watches		
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average				$32.91	35.4	92.9	$26.74	38.9	68.7	$26.67	38.2	69.9	$28.77	39.6	72.9	$22.27	37.9	58.
1941: January				37.69	38.9	96.9	30.47	41.4	73.6	29.21	38.7	75.5	35.96	44.0	81.8	23.90	38.9	61.
1947: August	$55.58	41.0	135.5	55.76	37.2	150.0	51.07	39.5	129.4	53.98	40.8	132.2	52.62	38.0	138.4	45.03	39.1	115.
September	55.94	41.0	136.6	59.35	39.2	151.5	52.62	40.2	130.9	55.82	41.2	135.5	54.37	38.9	139.6	46.87	40.4	116.
October	58.94	42.5	138.8	60.30	39.5	152.6	53.59	40.8	131.2	54.89	40.9	134.2	55.19	39.4	140.1	47.54	40.8	116.
November	58.94	42.0	140.4	61.30	39.8	154.0	54.27	41.1	132.0	55.69	41.2	135.1	55.93	39.7	141.0	48.64	41.4	117.
December	58.96	42.3	139.3	64.64	41.4	156.3	55.53	41.8	132.7	55.44	41.2	134.6	57.26	40.5	141.2	48.69	41.9	116.
1948: January	55.33	40.3	137.3	60.96	39.6	153.8	55.06	41.2	133.6	55.85	41.1	136.0	57.30	40.4	141.8	47.63	40.2	118.
February	55.65	39.8	140.0	59.00	38.1	154.8	55.07	41.2	133.8	55.58	41.0	135.7	57.73	40.6	142.2	48.59	41.0	118.
March	55.88	40.4	138.4	59.81	38.9	153.9	55.23	41.1	134.4	55.31	40.5	136.6	58.25	40.8	142.9	49.15	41.1	119.
April	56.36	40.3	139.8	59.14	38.6	153.3	54.87	40.9	134.3	56.49	41.1	137.5	56.84	40.0	142.2	49.09	40.8	120.
May	55.54	39.4	141.0	54.44	35.2	154.8	54.96	40.6	135.5	57.33	41.5	138.0	57.42	40.1	143.1	48.27	40.1	120.
June	54.07	37.5	144.2	61.30	37.7	162.4	55.91	40.8	136.9	57.96	41.3	140.3	59.35	41.2	144.0	48.89	40.1	121.
July	53.94	37.6	143.5	64.46	38.9	165.5	56.34	40.1	140.5	59.75	41.2	144.9	61.61	40.8	151.1	48.96	39.8	123.
August	62.67	41.6	149.7	65.43	39.2	166.8	58.17	40.9	142.3	61.74	41.4	149.3	63.01	41.0	154.2	50.80	40.7	124.

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Year and month	Nonferrous metals and their products—Continued												Lumber and timber basic products					
	Jewelry (precious metals) and jewelers' findings			Silverware and plated ware			Lighting equipment			Aluminum manufactures			Total: Lumber and timber basic products			Sawmills and logging camps		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$26.36	39.4	66.0	$26.03	40.7	64.3	$25.73	37.1	69.3	$27.49	39.3	69.9	$19.06	39.0	48.9	$18.29	38.4	47.6
1941: January	26.43	39.1	66.4	27.37	41.4	66.6	28.19	39.3	71.7	32.85	42.0	78.2	20.27	38.9	52.1	19.59	38.4	51.0
1947: August	46.40	39.8	117.2	57.20	44.1	129.9	48.78	37.4	130.5	49.34	38.9	126.6	45.32	43.3	104.8	45.05	43.1	104.4
September	50.32	42.0	120.4	60.93	46.1	132.1	50.02	38.4	130.4	49.74	38.6	128.7	45.41	42.8	106.2	44.58	42.5	104.9
October	52.97	43.6	122.2	61.31	46.4	132.1	51.73	39.3	131.7	52.02	39.7	130.0	45.23	42.6	106.3	44.09	42.2	104.6
November	53.39	42.7	125.5	61.65	45.9	134.4	52.51	40.0	131.4	52.15	39.8	130.9	45.30	42.2	107.4	44.27	41.9	105.6
December	55.53	44.4	125.4	63.80	47.2	135.3	54.11	40.5	133.6	52.86	40.1	132.0	45.65	43.2	105.6	44.20	42.8	103.2
1948: January	51.69	41.9	123.7	62.54	46.3	135.4	53.92	39.8	135.6	53.35	40.2	132.9	44.49	42.4	105.0	42.94	42.0	102.3
February	52.98	42.6	124.9	62.52	46.1	135.6	52.86	39.3	134.5	52.75	39.6	133.0	45.01	41.7	108.0	43.41	41.1	105.5
March	52.17	42.2	123.7	63.81	46.5	137.4	53.22	39.2	135.9	52.05	39.4	132.2	45.32	42.3	107.1	43.86	42.0	104.6
April	51.31	41.2	124.6	62.09	45.7	136.0	52.90	38.8	136.4	52.53	39.7	132.3	45.59	42.1	108.3	43.99	41.6	105.7
May	50.59	39.8	127.1	62.00	45.5	136.3	51.75	37.7	137.3	52.83	39.7	133.2	47.39	42.5	111.5	*45.06	*41.3	109.5
June	52.10	40.9	127.4	62.24	45.5	136.7	53.19	37.5	141.9	52.13	39.1	133.3	48.43	42.8	113.1	47.37	42.6	111.3
July	49.30	39.8	124.0	58.55	43.7	134.0	56.31	38.6	146.0	52.52	37.1	141.6	48.14	41.9	114.9	47.19	41.6	113.4
August	51.07	40.3	126.7	61.34	45.0	136.3	56.93	39.4	144.9	55.18	38.6	142.0	50.68	43.1	117.7	49.87	42.8	116.4

Year and month	Lumber and timber basic products—Con.			Furniture and finished lumber products									Stone, clay, and glass products		
	Planing and plywood mills			Total: Furniture and finished lumber products			Furniture			Caskets and other morticians' goods			Wood preserving			Total: Stone, clay, and glass products		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$22.17	41.1	54.0	$19.95	38.5	51.8	$20.51	38.9	53.0	-------	-------	-------	-------	-------	-------	$23.94	37.6	63.7
1941: January	22.51	40.5	55.4	20.90	38.7	54.0	21.42	39.0	55.2	-------	-------	-------	-------	-------	-------	25.02	37.4	66.9
1947: August	48.89	44.2	110.7	44.09	41.2	107.0	44.58	41.0	108.9	$45.69	40.6	112.2	$42.10	42.0	100.1	49.06	40.6	120.8
September	48.94	43.8	111.8	45.38	41.5	109.3	46.24	41.4	111.7	47.06	41.6	112.8	42.41	42.2	100.5	49.57	40.4	122.7
October	50.12	44.3	113.2	46.53	42.1	110.5	47.76	42.3	113.0	47.00	41.1	113.9	42.19	41.5	101.7	50.38	40.8	123.4
November	49.60	43.2	114.7	46.32	41.8	110.8	48.07	42.3	113.7	47.35	40.9	115.0	39.98	39.7	100.7	50.47	40.5	124.7
December	51.61	44.8	115.1	47.72	42.7	111.7	49.10	42.9	114.5	49.01	42.2	115.7	40.50	39.8	101.7	51.00	41.0	124.5
1948: January	50.67	43.9	115.2	47.02	41.9	112.2	48.54	42.2	115.1	48.52	41.8	115.7	39.71	39.2	101.4	50.10	40.0	125.3
February	51.31	43.8	117.1	46.68	41.4	112.7	48.38	41.9	115.5	48.85	41.8	115.5	36.95	35.8	103.1	49.98	39.8	125.5
March	51.06	43.8	116.6	47.08	41.8	112.6	48.58	42.1	115.6	49.21	42.3	115.6	39.59	38.6	102.6	51.41	40.8	126.0
April	51.94	44.0	118.1	46.34	41.0	113.1	47.64	41.1	116.1	48.23	41.3	116.7	41.09	39.8	103.3	51.77	40.7	127.1
May	52.53	43.9	119.7	46.39	40.8	113.6	47.60	40.8	116.7	47.48	40.7	116.5	42.29	40.3	105.0	52.30	40.7	128.6
June	53.18	43.8	121.3	46.54	40.7	114.5	47.57	40.6	117.4	47.61	40.6	117.2	42.45	40.4	105.0	52.45	40.6	129.2
July	52.51	43.1	121.8	46.34	40.3	115.1	47.04	40.0	117.8	47.37	40.0	117.7	42.97	40.4	106.5	51.54	39.4	130.7
August	54.30	44.2	123.1	48.12	41.3	116.4	49.12	41.3	118.8	48.65	40.6	119.4	42.45	40.3	105.6	54.14	40.9	132.2

Year and month	Stone, clay, and glass products—Continued																	
	Glass and glassware			Glass products made from purchased glass [2]			Cement			Brick, tile, and terra cotta			Pottery and related products			Gypsum		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$25.32	35.2	72.1	-------	-------	-------	$26.67	38.2	69.9	$20.55	37.8	54.3	$22.74	37.2	62.5	-------	-------	-------
1941: January	28.02	36.3	77.2	-------	-------	-------	26.82	37.9	70.9	21.74	36.9	58.7	22.92	36.4	63.5	-------	-------	-------
1947: August	50.40	39.5	128.0	$41.88	40.2	104.2	52.93	42.5	124.4	46.06	40.9	112.1	46.48	38.8	120.1	$55.39	45.7	121.2
September	51.57	39.2	131.7	42.91	40.1	107.1	52.68	41.8	126.1	46.51	40.9	113.3	46.14	38.5	120.7	54.68	45.0	121.5
October	52.27	39.4	132.8	44.41	41.1	108.1	52.32	42.0	124.5	47.37	41.3	114.3	48.18	39.6	122.1	56.70	45.9	123.4
November	53.05	39.2	135.4	43.87	40.4	108.5	52.19	41.9	124.5	46.81	40.5	114.8	48.25	39.4	122.7	56.35	45.3	124.5
December	53.07	39.5	134.4	46.16	42.3	109.2	51.94	42.0	123.7	47.46	41.2	114.6	48.55	39.2	123.8	56.53	45.6	124.1
1948: January	52.49	38.0	138.3	44.48	41.1	108.3	51.21	41.4	123.7	46.74	40.5	115.0	47.32	38.2	123.4	55.94	45.3	123.4
February	53.00	38.8	136.8	44.18	40.0	110.5	51.07	41.7	122.6	45.52	38.9	116.3	46.98	38.5	123.0	54.58	44.4	122.9
March	54.42	40.0	136.2	43.96	40.5	108.5	51.72	42.0	123.1	47.54	40.5	116.6	48.17	39.4	123.3	55.71	45.0	123.7
April	54.12	39.9	135.5	43.16	39.6	108.9	53.27	42.0	126.9	48.39	40.6	118.6	48.45	39.2	124.9	58.98	46.8	126.1
May	53.44	39.3	136.0	*45.53	40.4	*113.1	55.85	42.6	131.1	49.75	41.1	120.6	48.09	38.7	126.3	60.17	47.2	127.5
June	53.32	39.2	136.1	45.75	40.3	113.6	56.38	42.7	132.1	49.66	40.8	121.0	48.42	38.6	127.2	59.91	46.2	129.8
July	50.90	37.0	137.6	43.84	38.0	115.4	56.48	42.0	134.9	50.70	40.2	122.7	47.65	37.8	129.7	59.14	44.5	133.4
August	54.88	39.5	139.3	47.72	41.3	115.6	57.16	42.6	134.6	52.05	41.4	125.4	50.49	39.7	129.9	64.02	47.7	134.7

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

MANUFACTURING—Continued

Stone, clay, and glass products—Continued

Year and month	Lime			Marble, granite, slate, and other products			Abrasives			Asbestos products			Textile-mill products and other fiber manufactures: Total: Textile-mill products and other fiber manufactures			Textile-mill products and other fiber manufactures: Cotton manufactures except smallwares		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	-------	-------	-------	$26.18	36.9	71.4	-------	-------	-------	$24.43	39.0	62.7	$16.84	36.6	46.0	$14.26	36.7	38.8
1941: January	-------	-------	-------	24.29	34.6	70.8	-------	-------	-------	27.26	41.3	66.0	18.01	36.9	48.8	15.60	37.2	41.8
1947: August	$48.90	44.8	106.9	46.61	41.4	112.6	$51.26	39.2	130.6	53.53	42.2	127.7	39.44	38.2	103.2	37.50	38.4	97.7
September	49.23	45.0	108.1	47.56	42.2	112.7	54.57	40.3	135.6	52.30	41.3	126.6	41.39	39.5	104.8	38.55	39.2	98.3
October	51.96	46.1	108.5	48.60	42.5	114.3	54.30	40.4	134.5	52.57	41.3	127.3	41.94	39.7	105.5	39.22	39.6	99.1
November	50.33	45.8	108.9	46.27	40.2	115.2	55.68	40.7	137.0	54.05	41.9	129.2	43.73	40.1	109.0	42.47	40.4	105.1
December	50.48	46.4	108.5	48.68	41.9	116.0	60.68	44.0	138.0	53.85	41.8	128.9	45.15	41.0	110.0	43 64	41.1	106.1
1948: January	49.10	44.2	109.4	46.89	40.6	115.3	59.07	44.4	133.1	53.98	41.4	130.5	45.19	40.5	111.5	43.81	40.7	107.7
February	47.86	43.7	109.1	46.23	40.4	114.6	58.38	42.6	137.2	54.04	40.9	132.2	45.79	40.2	113.9	43.43	40.1	108.3
March	50.58	45.8	110.2	47.57	40.9	116.2	60.62	42.6	142.4	54.49	41.3	131.8	46.32	40.6	114.0	43.98	40.7	108.1
April	52.08	46.3	112.7	47.97	40.9	116.0	59.02	41.5	142.3	55.11	41.2	133.8	45.46	39.9	113.8	43.08	40.1	107.6
May	52.41	46.1	113.6	49.44	41.3	119.3	61.04	41.9	145.7	55.45	41.3	134.0	45.22	39.6	114.2	42.64	39.6	107.8
June	53.32	45.9	115.3	49.21	40.9	119.8	61.39	42.2	145.6	56.17	41.7	134.8	45.29	39.5	114.7	42.00	39.1	107.5
July	52.46	44.4	116.9	48.27	39.8	120.9	58.53	41.3	142 3	57.18	41.7	137.3	44.15	38.6	114.5	40.63	38.0	107.0
August	54.96	46.1	118.8	49.77	40.8	121.4	60.17	41.6	145.4	57.46	41.4	139.3	45.07	38.5	117.0	41.61	37.7	110.6

Textile-mill products and other fiber manufactures—Continued

Year and month	Cotton smallwares			Silk and rayon goods			Woolen and worsted manufactures, except dyeing and finishing			Hosiery			Knitted cloth [2]			Knitted outerwear and knitted gloves		
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$18.22	39.0	47.4	$15.78	36.5	42.9	$19.21	36.4	52.8	$18.98	35.6	53.6	$18.15	38.4	46.8	$17.14	37.0	46.1
1941: January	19.74	39.3	50.3	16.53	35.7	46.1	21.78	37.9	57.6	18.51	33.8	55.0	19.90	37.9	50.3	17.65	35.8	48.9
1947: August	38.58	38.2	100.9	41.65	40.0	104.3	42.28	36.6	115.6	38.08	36.8	103.4	41.11	40.7	100.1	35.42	37.6	92.6
September	40.67	39.7	102.4	43.23	40.9	105.7	46.99	40.2	116.9	39.48	37.7	104.9	41.71	40.5	102.7	35.86	37.5	95.1
October	40.49	39.1	103.5	43.57	41.0	106.2	46.70	39.7	117.8	41.00	38.3	106.9	42.21	41.1	102.1	38.01	38.8	96.9
November	40.13	38.7	103.6	44.84	41.2	108.8	46.95	39.6	118.8	42.11	38.7	108.7	42.53	40.8	103.5	38.30	38.7	98.0
December	42.35	40.5	104.5	46.48	42.3	110.0	49.12	41.2	119.2	42.95	39.1	109.8	44.18	41.9	104.5	38.02	38.5	97.8
1948: January	43.15	40.3	107.1	47.55	41.9	113.7	48.79	40.8	119.5	41.76	37.9	110.3	44.65	42.1	106.2	37.94	37.7	99.2
February	43.23	40.4	107.2	47.92	41.8	114.7	52.82	40.8	130.3	41.72	37.6	110.8	45.23	41.9	107.9	39.18	38.7	100.1
March	43.31	40.2	108.0	48.53	42.2	115.1	53.49	40.7	131.3	42.80	38.6	110.8	45.84	41.9	109.4	39.08	38.6	100.4
April	43.03	39.6	108.7	48.31	41.8	115.6	52.33	39.9	131.1	41.61	37.4	111.2	44.39	41.4	107.2	38.73	38.4	100.7
May	42.72	39.3	108.9	48.38	41.8	115.7	52.61	40.1	131.4	41.14	36.7	112.0	42.79	39.7	107.8	39.00	38.5	101.2
June	43.98	39.8	110.6	48.47	41.8	115.9	53.10	40.3	132.0	42.01	36.6	114.6	43.94	40.7	107.9	38.84	38.3	100.4
July	43.48	39.3	110.6	47.69	41.6	114.7	52.31	39.5	132.7	41.52	36.1	114.8	44.21	40.5	109.1	37.28	37.2	98.7
August	43.40	38.9	111.5	48.85	41.3	118.2	52.13	39.6	131.7	43.22	36.9	117.2	44.84	40.7	110.2	37.89	37.3	100.0

Textile-mill products and other fiber manufactures—Continued

Year and month	Knitted underwear			Dyeing and finishing textiles, including woolen and worsted			Carpets and rugs, wool			Hats, fur-felt			Jutegoods, except felts [3]			Cordage and twine		
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$15.05	36.9	41.0	$20.82	38.6	53.5	$23.25	36.1	64.4	$22.73	32.2	70.7	-------	-------	-------	-------	-------	-------
1941: January	16.06	36.0	44.6	21.65	39.3	55.1	25.18	37.3	67.5	27.12	36.2	75.5	-------	-------	-------	-------	-------	-------
1947: August	34.60	38.2	90.4	45.31	40.5	111.6	47.43	39.4	120.6	45.67	34.7	131.2	$36.40	41.0	90.8	$39.10	38.6	101.4
September	36.30	39.5	91.8	47.89	41.9	114.2	52.38	41.0	127.9	47.44	35.9	133.4	37.51	41.4	90.6	40.00	38.8	103.0
October	36.50	39.3	93.0	47.16	41.5	113.6	53.53	41.4	129.5	48.33	37.0	131.1	37.27	41.1	90.6	41.70	40.1	104.1
November	37.41	39.5	94.7	48.16	41.2	116.7	53.99	41.6	130.1	47.10	36.2	130.3	37.60	41.5	90.6	42.55	40.4	105.3
December	38.17	40.2	95.1	50.25	42.7	117.5	54.91	42.2	130.6	51.52	39.1	132.1	38.21	41.2	92.7	44.13	41.3	106.8
1948: January	37.77	39.4	95.9	51.04	42.3	120.4	55.23	41.9	132.2	50.17	37.8	132.8	41.75	40.8	102.4	44.63	41.3	108.1
February	37.76	38.9	96.9	51.80	42.2	122.7	55.35	42.0	131.9	51.79	38.7	132.8	42.28	40.1	105.3	44.44	40.8	109.1
March	38.89	39.5	98.1	51.85	42.3	122.7	55.79	42.1	132.7	50.36	37.2	134.8	42.44	40.0	106.0	43.65	40.6	107.9
April	38.72	39.1	98.8	51.44	41.8	122.9	55.18	41.4	133.6	48.58	35.3	137.9	42.93	40.6	105.7	42.21	39.1	107.9
May	37.88	38.3	98.7	50.67	41.3	122.6	56.22	41.8	134.8	49.94	36.7	136.4	42.69	40.1	106.4	41.82	38.5	108.4
June	38.09	38.4	99.4	51.05	41.5	122.9	57.86	42.0	138.0	51.72	37.7	137.5	42.65	40.2	106.0	42.68	39.0	109.4
July	36.79	37.3	98.9	48.76	39.9	122.1	57.42	40.7	141.2	49.52	37.1	133.8	42.58	40.6	104.8	41.22	37.8	109.2
August	37.82	37.4	101.4	49.86	40.1	124.1	59.36	41.3	143.9	52.52	37.3	141.3	43.37	41.1	105.6	41.71	38.0	110.8

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Apparel and other finished textile products

Year and month	Total: Apparel and other finished textile products			Men's clothing, not elsewhere classified			Shirts, collars, and nightwear			Underwear and neckwear, men's			Work shirts			Women's clothing, not elsewhere classified		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$18.17	34.5	52.7	$19.32	33.2	58.1	$13.75	34.6	39.8	$14.18	35.4	40.1	$11.03	35.8	30.9	$19.20	33.9	51.9
1941: January	18.76	33.5	56.0	20.40	33.4	60.7	14.22	33.0	43.1	14.85	33.6	44.2	12.33	33.6	36.7	19.47	33.2	55.3
1947: August	36.57	35.2	103.8	38.96	35.1	109.0	30.74	36.0	85.2	31.51	34.5	91.4	25.54	35.4	72.2	45.49	34.6	128.5
September	37.64	36.0	104.6	41.06	36.8	110.6	32.38	36.9	87.8	33.05	35.5	93.2	25.59	34.6	74.0	45.78	35.0	127.9
October	38.78	36.9	105.1	42.78	37.9	112.0	33.42	37.8	88.5	35.00	36.9	94.9	25.15	33.7	74.5	46.91	35.8	127.9
November	37.09	36.4	101.9	42.24	37.5	111.6	33.75	38.0	88.9	35.09	36.5	96.1	24.90	34.1	72.8	43.82	35.3	121.7
December	39.00	37.1	105.2	43.11	37.7	113.6	35.12	38.1	91.8	35.56	37.3	95.3	24.32	34.1	71.2	46.76	36.2	127.0
1948: January	40.00	36.6	109.4	44.11	37.1	117.8	34.45	36.9	92.9	35.03	36.4	95.7	23.73	32.7	72.5	48.52	36.0	132.7
February	40.23	36.7	109.8	44.05	37.1	117.6	34.20	36.8	92.8	34.78	35.5	97.4	25.69	35.6	72.1	49.09	36.1	133.4
March	40.09	36.7	109.2	44.73	37.4	118.8	35.02	37.4	93.4	35.77	36.3	98.4	26.50	36.9	71.8	48.10	36.1	131.0
April	37.61	36.2	104.0	44.31	37.3	117.3	34.39	36.9	92.8	34.35	36.0	95.4	26.85	36.8	73.0	43.20	35.1	120.1
May	37.24	35.8	104.0	43.50	36.8	117.1	33.83	36.3	92.7	34.80	36.8	94.6	27.22	36.5	74.4	43.27	35.1	120.6
June	37.61	35.6	105.5	43.19	36.4	116.9	33.00	35.5	92.5	34.00	36.0	95.0	27.21	37.1	73.2	43.94	35.0	123.9
July	38.80	35.8	108.3	42.84	36.7	115.9	33.14	36.2	92.4	34.54	36.6	95.0	26.67	36.2	73.5	45.91	34.9	130.8
August	40.35	36.5	110.7	44.04	36.8	118.2	32.97	36.3	92.1	35.30	37.0	96.0	27.32	36.4	73.9	48.63	35.9	134.0

Apparel and other finished textile products—Continued

Year and month	Corsets and allied garments			Millinery			Handkerchiefs			Curtains, draperies, and bedspreads			Housefurnishings, other than curtains, etc.			Textile bags		
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$17.15	37.5	45.6	$22.19	33.8	63.6	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1941: January	17.24	35.6	48.2	22.31	30.5	64.8	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
1947: August	34.80	36.7	94.2	49.52	36.3	131.4	$30.40	35.5	85.7	$28.93	36.1	81.1	$37.74	38.6	97.7	$35.34	37.8	93.6
September	35.75	37.5	95.4	49.74	35.8	134.0	31.85	36.7	86.7	30.64	37.3	83.0	38.33	38.2	99.6	35.86	38.1	94.1
October	36.76	38.5	95.6	53.20	38.2	133.7	32.57	37.5	86.8	31.55	37.5	84.4	38.72	38.3	100.4	36.76	38.9	94.4
November	36.80	38.6	95.5	39.14	31.3	121.3	33.31	37.7	88.4	31.26	37.2	83.9	38.03	38.3	98.3	37.25	38.9	95.8
December	36.89	39.0	94.8	46.03	35.0	125.6	32.55	37.0	88.1	31.28	37.1	84.3	41.34	40.5	101.2	37.60	39.5	95.3
1948: January	37.37	38.0	98.5	53.14	37.3	136.5	30.46	34.4	88.4	31.44	36.8	85.6	38.54	38.2	99.9	37.20	38.9	95.6
February	37.07	37.9	97.9	57.84	39.3	141.5	32.66	36.4	89.7	30.69	35.9	85.4	36.83	37.7	96.5	36.23	38.0	95.2
March	38.14	38.5	99.3	52.77	36.9	139.4	34.21	37.1	92.2	31.40	35.4	88.2	38.29	38.1	100.0	35.80	37.1	96.4
April	37.39	37.8	99.1	49.95	36.0	135.3	33.09	36.1	91.7	30.17	33.1	89.1	38.46	38.2	100.1	36.35	37.2	97.7
May	35.35	35.8	100.3	42.82	31.5	133.3	31.66	34.8	90.9	30.41	32.9	91.2	37.52	37.2	99.8	37.94	38.4	98.7
June	36.58	36.2	101.3	45.29	32.7	135.2	31.40	34.3	91.7	30.50	33.6	89.8	40.19	39.1	101.9	38.10	38.3	99.5
July	36.33	36.3	100.7	50.68	34.8	141.5	30.62	33.8	90.7	30.33	34.2	90.5	39.01	38.2	101.0	38.93	38.9	100.1
August	36.77	36.5	100.8	53.90	36.8	145.3	33.07	35.8	92.4	32.24	35.5	91.4	39.80	38.7	101.2	39.68	39.2	101.2

Leather and leather products

Year and month	Total: Leather and leather products			Leather			Boot and shoe cut stock and findings			Boots and shoes			Leather gloves and mittens			Trunks and suitcases		
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$19.13	36.2	52.8	$24.43	38.7	63.4	-------	-------	-------	$17.83	35.7	50.3	-------	-------	-------	-------	-------	-------
1941: January	20.66	37.3	55.4	25.27	38.3	66.2	-------	-------	-------	19.58	37.0	53.0	-------	-------	-------	-------	-------	-------
1947: August	40.25	38.1	105.7	51.19	40.0	127.7	$39.86	39.1	103.4	38.32	37.7	101.8	$32.33	35.7	91.2	$42.09	39.4	106.7
September	41.89	39.1	107.2	52.66	41.0	128.3	40.14	39.2	103.2	40.12	38.8	103.5	33.45	36.3	92.7	43.07	39.5	109.5
October	42.18	39.0	108.2	52.52	40.7	128.7	39.19	38.3	103.7	40.41	38.7	104.6	34.43	36.4	94.5	46.15	40.9	111.4
November	41.93	38.3	109.5	52.82	40.6	129.7	38.92	37.2	106.0	39.98	37.8	105.9	33.88	36.3	93.4	47.61	42.2	112.9
December	42.67	39.1	109.2	53.65	41.3	130.0	41.36	39.3	106.3	40.87	38.7	105.6	33.91	36.3	93.1	45.53	40.9	110.9
1948: January	42.63	39.0	109.5	53.06	40.8	129.9	41.36	38.9	107.5	41.09	38.8	105.9	33.75	35.7	94.7	42.33	38.4	110.5
February	42.99	39.0	110.2	53.38	40.5	131.7	41.23	38.4	108.0	41.35	38.8	106.5	33.67	36.0	94.1	45.61	40.6	112.9
March	41.87	37.8	110.6	51.91	39.4	131.5	40.55	37.6	108.6	40.21	37.5	107.1	33.82	36.0	94.0	45.83	40.6	113.5
April	40.34	36.2	111.6	51.59	39.1	131.8	39.90	36.5	110.7	38.09	35.3	108.0	33.18	35.4	93.8	45.35	40.1	113.0
May	39.65	35.5	111.8	52.38	39.4	133.0	39.72	36.3	110.5	36.79	34.3	107.4	34.77	35.2	99.1	45.06	39.6	113.7
June	41.38	37.0	111.8	53.11	39.5	134.5	41.24	37.4	110.8	39.00	36.4	107.4	35.78	35.8	99.9	44.86	39.0	115.0
July	41.55	37.4	111.2	53.39	39.5	135.1	41.09	37.4	110.4	39.42	37.0	106.7	35.01	35.8	98.8	44.42	38.8	115.2
August	42.76	38.0	112.6	53.70	39.8	135.6	42.62	38.8	110.5	40.76	37.5	108.5	35.79	36.3	100.5	47.19	40.6	116.8

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

MANUFACTURING—Continued

Food

Year and month	Total: Food			Slaughtering and meat packing			Butter			Condensed and evaporated milk			Ice cream			Flour		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg.
			Cents			Cents			Cents			Cents			Cents			Cen
1939: Average	$24.43	40.3	60.7	$27.85	40.6	68.6	$22.60	46.7	48.4	-------	-------	-------	$29.24	46.2	62.6	$25.80	42.3	
1941: January	24.69	39.0	63.3	26.84	39.3	68.1	22.84	44.6	50.9	-------	-------	-------	29.41	44.2	65.3	25.27	41.0	
1947: August	49.45	43.4	114.0	54.33	43.0	126.7	46.20	47.7	96.4	$49.21	47.2	104.2	50.84	46.9	105.2	59.69	50.1	
September	49.04	43.4	112.9	55.31	43.4	127.6	45.65	47.4	96.1	49.66	46.9	105.9	50.12	45.7	105.9	59.91	49.9	
October	49.61	42.8	115.9	54.98	43.2	127.3	45.58	46.3	98.1	49.24	46.5	105.8	49.86	45.5	106.4	59.01	49.0	
November	49.90	42.5	117.3	61.31	46.9	130.5	46.05	46.1	99.5	48.54	45.7	106.2	49.40	44.3	107.2	59.15	48.6	
December	50.93	43.3	117.5	61.57	47.7	129.1	46.98	46.5	100.4	49.32	45.9	107.4	49.87	44.8	107.3	56.45	47.6	
1948: January	49.44	42.0	117.7	57.12	44.8	127.5	45.92	45.9	99.5	50.20	45.5	110.3	50.50	45.3	107.9	54.43	46.4	
February	49.18	41.6	118.1	51.88	40.7	127.7	47.28	46.3	101.1	51.68	45.9	112.5	51.12	45.0	109.3	54.56	45.9	
March	49.36	41.6	118.7	56.62	43.6	130.1	45.92	45.8	101.1	52.28	46.4	112.6	51.44	45.4	109.5	50.99	43.7	
April	50.95	42.4	120.1	68.51	48.1	142.5	47.16	45.6	103.2	53.51	46.7	114.7	50.86	45.3	108.7	53.07	45.3	
May	51.26	42.5	120.7	67.66	46.7	142.4	47.52	45.9	103.3	55.36	47.5	116.5	51.11	45.0	108.6	55.12	46.1	
June	52.09	42.8	121.7	61.24	44.1	138.3	48.42	46.3	104.3	56.66	48.5	116.8	52.22	45.8	110.3	57.48	47.8	
July	51.83	42.7	121.5	58.75	42.9	136.8	49.66	46.9	106.3	56.42	47.6	118.6	53.58	46.2	112.5	60.05	48.4	
August	49.79	41.1	121.3	55.61	41.2	135.0	49.56	46.7	107.0	56.07	47.7	117.4	52.67	44.6	114.4	61.14	48.1	

Food—Continued

Year and month	Cereal preparations			Baking			Sugar refining, cane			Sugar, beet			Confectionery			Beverages, nonalcoholic		
			Cents			Cents			Cents			Cents			Cents			Cen
1939: Average	-------	-------	-------	$25.70	41.7	62.1	$23.91	37.6	63.6	$24.68	42.9	58.5	$18.64	38.1	49.2	$24.21	43.6	
1941: January	-------	-------	-------	26.46	41.1	64.4	22.73	35.0	65.0	24.03	36.5	63.0	19.19	37.6	51.1	25.28	42.0	
1947: August	$54.32	42.4	128.1	45.52	41.9	109.1	51.89	46.3	112.1	50.88	41.7	122.0	38.39	38.8	99.3	47.89	46.6	
September	51.28	40.5	126.5	46.14	41.9	110.4	50.87	44.0	115.6	51.55	40.8	126.3	41.20	40.4	102.1	47.91	46.0	
October	50.54	39.7	127.3	46.85	41.9	111.5	53.03	45.3	116.8	50.59	44.8	113.0	42.24	41.1	102.9	45.85	44.3	
November	52.05	40.3	129.1	46.26	41.6	111.5	56.39	46.0	122.4	56.47	48.2	117.2	42.24	40.8	103.6	44.60	43.3	
December	54.13	40.8	132.8	47.43	42.3	111.9	48.24	41.2	117.1	53.87	46.1	116.8	42.96	41.5	103.5	45.22	43.7	
1948: January	54.10	40.5	133.5	47.03	41.6	113.1	45.66	38.0	120.1	50.45	39.0	129.3	40.82	39.6	103.4	45.05	43.0	
February	55.58	40.6	136.9	49.30	43.6	113.2	44.66	37.9	117.7	55.30	42.4	130.5	40.45	38.9	104.5	44.99	42.9	
March	52.46	38.7	135.6	47.38	41.9	113.1	49.30	41.0	120.2	50.11	38.7	129.6	40.48	39.1	105.0	44.93	43.0	
April	54.50	39.8	137.0	48.00	42.1	113.8	52.57	43.2	121.7	50.19	38.4	130.2	40.83	38.6	106.0	45.46	43.7	
May	55.64	40.4	137.7	49.09	42.7	114.8	51.08	41.9	122.0	50.27	37.5	133.9	*39.21	37.5	103.6	45.75	43.9	
June	58.00	41.5	139.8	50.03	42.9	116.5	53.14	44.0	120.7	50.20	38.5	130.3	42.15	39.5	106.9	47.20	45.0	
July	57.92	41.7	139.1	50.01	42.7	116.8	57.73	45.9	125.8	50.73	38.4	132.1	42.32	39.3	107.8	49.39	46.1	
August	53.66	39.0	137.8	49.77	42.5	116.9	57.10	45.5	125.7	49.20	37.0	133.0	43.47	40.2	108.8	45.18	42.5	

Food—Continued / Tobacco manufactures

Year and month	Malt liquors			Canning and preserving			Total: Tobacco manufactures			Cigarettes			Cigars			Tobacco (chewing and smoking) and snuff		
			Cents			Cents			Cents			Cents			Cents			Cen
1939: Average	$35.01	38.3	91.6	$16.77	37.0	46.4	$16.84	35.4	47.6	$20.88	37.2	56.1	$14.59	34.7	41.9	$17.53	34.1	
1941: January	34.57	36.4	95.2	16.67	33.0	51.0	17.89	35.7	50.1	22.38	37.3	60.0	15.13	35.0	43.2	18.60	34.9	
1947: August	68.98	45.3	152.3	45.88	42.6	108.3	37.26	39.2	95.1	43.74	41.2	106.1	32.00	37.3	85.3	37.13	40.1	
September	69.54	45.2	153.9	43.69	42.8	102.5	37.33	39.2	95.2	43.36	40.7	106.6	32.42	37.7	85.7	38.39	41.2	
October	66.10	43.5	151.7	44.75	40.9	110.0	37.90	39.7	95.4	43.92	41.3	106.3	33.21	38.3	86.3	37.78	40.6	
November	64.03	42.1	152.3	37.94	35.9	106.2	37.67	39.4	95.6	43.15	40.6	106.3	33.69	38.6	86.8	36.10	38.5	
December	63.54	42.1	151.1	41.14	37.7	109.3	39.16	39.9	98.3	45.45	40.6	111.9	34.24	39.3	86.8	37.16	39.1	
1948: January	61.03	40.4	151.0	41.10	37.3	110.2	37.97	38.6	98.4	44.74	39.4	113.5	32.64	38.1	86.0	35.38	37.1	
February	62.25	40.9	152.0	42.73	38.4	111.8	35.04	36.2	96.8	37.93	33.9	112.0	32.59	37.9	85.7	35.89	37.2	
March	62.57	41.2	151.6	40.77	36.5	112.0	36.52	37.7	96.8	42.99	38.2	112.4	32.12	37.5	85.2	35.78	36.9	
April	65.24	42.5	153.2	41.63	37.0	113.0	37.19	38.2	97.3	44.35	39.6	111.9	32.13	37.4	85.7	36.32	37.1	
May	65.31	42.5	153.7	41.35	36.8	112.5	37.12	37.7	98.4	44.32	38.9	113.9	31.80	36.9	85.8	36.91	37.3	
June	67.74	42.9	157.8	41.16	38.0	109.0	37.86	37.8	100.3	45.84	39.1	117.2	31.73	36.8	86.3	37.93	37.6	
July	71.35	44.1	161.0	41.78	39.0	108.3	38.51	38.0	101.4	46.59	39.8	117.1	32.24	36.7	87.7	37.59	37.1	
August	69.14	42.9	161.2	39.51	36.2	110.2	39.26	39.0	100.8	48.39	41.5	116.7	32.29	37.1	86.7	38.81	38.4	

See footnotes at end of table.

ABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Year and month	Paper and allied products												Printing, publishing, and allied industries		
	Total: Paper and allied products			Paper and pulp			Envelopes			Paper bags			Paper boxes			Total: Printing, publishing, and allied industries		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
9: Average	$23.72	40.1	59.2	$24.92	40.3	62.0	-------	-------	-------	-------	-------	-------	$21.78	40.2	54.7	$32.42	37.4	86.6
1: January	25.16	40.0	62.9	27.02	40.8	66.2	-------	-------	-------	-------	-------	-------	22.26	38.8	57.6	33.49	37.8	88.6
7: August	50.72	42.4	119.6	56.30	44.1	127.6	$44.96	41.0	110.7	$41.89	38.4	109.3	44.92	40.8	110.4	59.48	39.4	150.8
September	51.99	42.9	121.0	57.14	44.5	128.3	47.02	42.2	112.5	42.05	38.2	110.2	46.53	41.6	112.2	61.61	40.2	153.4
October	52.22	43.0	121.5	57.10	44.4	128.7	46.97	42.1	112.8	43.67	39.3	111.3	47.37	42.1	112.7	61.62	40.0	154.0
November	52.80	43.2	122.2	57.40	44.4	129.2	46.52	41.9	112.0	43.17	39.0	110.6	48.66	42.7	114.3	62.30	40.0	155.6
December	53.69	43.8	122.6	58.21	44.9	129.5	47.35	42.2	112.2	45.29	40.7	111.3	49.44	43.3	114.4	63.37	40.4	156.8
8: January	53.20	43.1	123.5	57.75	44.4	130.1	46.50	41.4	113.9	45.23	40.8	111.2	48.35	42.0	115.5	62.41	39.5	157.9
February	53.61	43.1	124.5	58.41	44.5	131.0	46.68	41.3	114.6	44.34	39.5	112.0	48.75	41.9	116.7	62.72	39.1	160.4
March	53.82	43.1	124.9	58.50	44.5	131.3	46.30	41.1	114.4	45.69	40.7	112.1	49.14	41.8	117.7	63.97	39.5	162.1
April	53.36	42.7	125.0	58.02	44.1	131.3	46.26	40.8	114.9	45.14	40.5	111.3	48.32	41.0	118.0	64.62	39.2	164.6
May	54.28	42.8	126.9	59.47	44.6	133.4	46.34	40.8	115.0	44.93	39.8	112.6	48.64	40.7	119.9	65.06	39.1	166.3
June	55.34	42.8	129.2	60.40	44.1	136.8	47.02	41.3	115.8	46.29	40.8	113.0	50.48	41.6	121.6	65.48	39.1	167.6
July	55.97	42.5	131.7	61.49	43.9	140.0	45.87	40.6	114.8	48.61	41.6	116.7	49.87	40.7	122.9	65.06	38.8	167.5
August	56.98	43.2	132.0	62.32	44.4	140.2	47.86	41.4	118.3	49.32	41.3	119.3	51.50	42.0	123.3	65.90	39.1	168.4

Year and month	Printing, publishing, and allied industries—Continued									Chemicals and allied products								
	Newspapers and periodicals			Printing; book and job			Lithographing			Total: Chemicals and allied products			Paints, varnishes, and colors			Drugs, medicines, and insecticides		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
9: Average	$37.58	36.1	100.4	$30.30	38.3	80.4	-------	-------	-------	$25.59	39.5	64.9	$28.48	40.5	70.4	$24.16	39.7	59.2
1: January	38.15	35.4	105.2	31.64	39.6	81.0	-------	-------	-------	27.53	39.9	69.0	29.86	40.3	74.1	24.68	39.3	61.9
7: August	67.74	38.5	173.6	55.95	40.0	140.6	$57.56	40.1	143.6	51.27	40.9	125.2	53.76	42.1	127.9	45.68	39.9	114.4
September	69.40	39.0	175.3	58.32	40.8	143.6	60.51	41.2	146.7	51.81	41.0	126.3	53.55	41.8	128.4	46.43	39.5	117.5
October	69.18	38.7	175.8	58.63	40.7	145.1	60.16	41.1	146.2	52.67	41.4	127.3	53.93	41.9	129.0	47.90	40.4	118.5
November	69.78	38.6	177.6	59.35	40.7	146.9	62.19	42.4	146.7	53.15	41.3	128.7	55.06	41.9	131.6	47.35	40.0	118.3
December	71.45	39.1	179.1	60.22	41.1	147.9	62.91	42.3	148.6	53.73	41.5	129.3	55.11	42.0	131.4	47.90	40.4	118.5
8: January	68.96	37.8	179.7	60.23	40.7	149.3	61.03	40.4	151.1	54.31	41.4	131.1	55.34	42.0	132.1	48.31	40.4	119.6
February	70.36	38.3	181.2	60.13	39.8	152.8	60.04	39.8	150.9	54.12	41.1	131.5	55.73	41.8	133.4	48.42	40.2	120.6
March	71.32	38.4	184.3	60.96	40.3	152.8	62.92	40.3	156.0	54.15	41.2	131.5	55.71	41.7	133.8	48.44	40.2	120.5
April	72.79	38.5	187.0	61.26	39.9	155.1	61.78	39.5	156.5	54.38	41.0	132.7	55.54	41.5	134.4	48.36	39.8	121.6
May	73.04	38.4	187.7	61.92	39.8	157.0	63.24	39.5	160.1	55.24	41.0	134.7	57.22	42.2	135.8	48.91	39.4	124.1
June	73.36	38.0	189.6	62.25	39.7	157.9	64.60	40.0	161.6	56.64	41.4	136.9	57.84	42.4	136.5	49.56	39.5	125.7
July	72.39	37.8	189.4	62.06	39.7	157.6	62.45	38.6	161.8	57.18	41.1	139.1	59.11	42.7	138.7	49.21	39.0	126.0
August	73.48	38.2	191.1	62.24	39.8	157.8	65.07	39.9	162.6	57.60	41.0	140.6	59.03	42.0	139.9	49.29	38.9	127.0

Year and month	Chemicals and allied products—Continued																	
	Soap			Rayon and allied products			Chemicals, not elsewhere classified			Explosives and safety fuses			Ammunition, small-arms			Cottonseed oil		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
9: Average	$28.11	39.8	70.7	$24.52	37.9	64.6	$31.30	40.0	78.4	$29.99	38.8	77.3	$22.68	39.0	61.2	$13.70	44.3	30.2
1: January	29.58	40.0	74.0	27.26	39.2	69.6	33.10	40.3	82.2	31.56	37.8	83.5	24.05	38.6	62.3	15.55	44.6	33.8
7: August	59.04	43.0	137.4	49.04	40.0	122.6	57.44	40.7	141.0	57.08	41.9	136.1	44.96	41.0	109.8	35.76	48.9	73.2
September	62.05	44.0	141.0	49.74	39.6	125.7	57.98	40.5	143.2	57.39	41.6	138.1	52.69	42.1	125.0	36.30	51.0	71.2
October	61.58	43.5	141.4	48.71	39.0	124.9	58.46	40.8	143.2	56.65	40.5	140.0	53.13	42.9	123.9	38.84	53.8	72.2
November	62.66	44.1	142.0	49.07	39.2	125.2	59.21	40.9	144.8	58.20	40.7	143.0	53.30	43.1	123.8	38.47	52.6	73.1
December	65.01	44.7	145.6	49.73	39.2	126.8	60.07	41.2	145.7	57.36	40.0	143.3	53.85	43.3	124.3	38.68	52.9	73.1
8: January	64.69	44.1	146.6	50.36	39.2	128.4	60.80	41.2	147.7	58.85	40.8	144.1	48.09	40.5	118.8	38.86	52.2	74.6
February	64.54	43.8	147.5	50.33	39.3	128.0	60.82	41.1	147.9	59.20	41.2	143.8	48.19	40.6	118.7	36.59	48.8	75.0
March	62.83	42.8	146.7	50.68	39.5	128.4	60.84	41.0	148.3	58.24	40.5	143.7	49.04	40.7	120.4	37.95	50.3	75.5
April	64.29	42.1	152.8	51.29	39.8	128.7	60.97	41.1	148.4	56.47	39.6	142.7	49.37	40.8	120.9	37.50	49.4	75.9
May	64.99	42.1	154.3	51.46	39.7	129.6	61.48	41.2	149.3	59.34	40.6	146.2	50.28	41.3	121.8	38.07	49.0	77.8
June	63.09	41.5	152.1	51.72	39.8	129.8	63.17	41.9	150.9	61.58	41.9	147.1	51.48	41.2	124.3	37.94	48.0	79.1
July	62.44	41.0	152.3	53.38	40.1	133.0	63.49	41.3	153.9	61.65	41.8	147.3	53.05	41.2	127.9	38.77	47.6	81.6
August	63.78	41.9	152.3	55.32	39.8	139.1	63.62	41.1	154.9	63.93	41.8	152.9	52.64	41.2	127.0	38.59	49.0	78.7

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con

MANUFACTURING—Continued

Year and month	Chemicals and allied products—Con.			Products of petroleum and coal											Rubber products		
	Fertilizers			Total: Products of petroleum and coal			Petroleum refining			Coke and by-products			Roofing materials			Total: Rubber products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$14.71	35.8	41.2	$32.62	36.5	89.4	$34.97	36.1	97.4	-------	-------	-------	-------	-------	-------	$27.84	36.9	75.5
1941: January	14.89	34.8	42.9	32.46	36.6	88.7	34.46	35.7	97.0	-------	-------	-------	-------	-------	-------	30.38	39.0	77.8
1947: August	37.17	40.9	90.8	60.62	40.6	149.4	63.12	40.3	156.7	$54.15	39.8	136.3	$57.17	44.6	128.2	55.92	38.7	144.6
September	38.85	41.8	93.0	61.84	41.0	150.9	64.75	40.7	159.1	53.08	38.6	138.1	57.56	44.7	128.7	57.76	39.9	144.7
October	36.85	40.5	90.9	60.94	40.5	150.5	63.51	39.9	159.3	53.83	39.9	135.0	58.88	45.2	130.2	57.62	40.1	143.6
November	35.53	39.2	90.7	62.54	41.2	151.8	65.86	41.0	160.7	54.06	39.8	135.9	58.74	45.4	130.6	57.99	39.9	145.4
December	36.56	40.7	89.7	63.21	40.8	155.1	66.32	40.3	164.7	54.37	39.7	137.1	60.60	45.5	133.1	59.47	40.9	145.4
1948: January	37.23	41.5	89.7	64.47	40.7	158.6	67.54	39.8	169.9	56.70	40.4	140.4	58.35	44.4	131.4	57.33	39.7	144.4
February	34.96	39.7	88.1	64.58	40.8	158.1	67.64	40.0	168.9	57.06	40.9	139.5	58.67	44.1	133.2	54.70	38.5	142.1
March	36.25	41.6	87.1	64.62	40.6	159.3	67.77	40.1	169.2	56.74	40.3	140.8	59.51	44.3	134.2	53.24	37.8	140.8
April	36.49	41.5	88.0	64.45	40.3	160.0	68.50	40.2	170.4	53.54	38.4	139.5	58.84	44.0	133.8	53.39	37.8	141.3
May	37.40	41.4	90.4	67.16	41.2	163.1	71.14	40.9	174.0	57.01	40.2	141.9	60.66	44.9	135.2	55.45	39.0	142.2
June	39.34	41.2	95.4	67.18	40.7	165.0	70.96	40.2	176.3	57.84	40.3	143.7	61.09	44.7	136.7	57.14	39.7	143.9
July	40.82	42.1	97.0	69.46	40.8	170.3	74.01	40.4	183.2	57.44	39.8	144.3	62.78	45.2	139.0	58.37	39.7	147.1
August	40.37	40.7	99.1	70.62	41.2	171.4	74.78	41.0	183.1	59.94	40.0	149.8	63.58	44.9	141.5	60.54	40.3	150.2

Year and month	Rubber products—Continued									Miscellaneous industries								
	Rubber tires and inner tubes			Rubber boots and shoes			Rubber goods, other			Total: Miscellaneous industries			Instruments (professional and scientific), and fire-control equipment			Pianos, organs, and parts		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$33.36	35.0	95.7	$22.80	37.5	60.7	$23.34	38.9	60.5	$24.48	39.2	62.4	-------	-------	-------	-------	-------	-------
1941: January	36.67	37.7	97.5	26.76	41.9	63.9	24.97	39.4	63.9	25.35	39.3	64.5	$35.33	45.7	77.3	-------	-------	-------
1947: August	62.15	37.8	164.0	47.23	39.9	118.3	49.17	39.7	123.7	46.32	39.3	117.7	54.27	39.9	135.3	$50.88	40.7	125.0
September	64.75	38.9	166.1	49.92	41.8	119.4	50.40	40.9	123.4	47.91	40.2	119.1	55.00	39.8	136.1	53.81	41.9	129.0
October	63.78	38.7	164.7	51.28	42.4	121.1	51.03	41.4	123.2	48.74	40.6	120.0	55.67	39.9	137.5	52.64	40.8	130.1
November	64.86	38.9	166.1	49.26	40.6	121.3	51.27	41.0	125.2	49.14	40.7	120.7	56.06	40.0	136.9	54.24	41.6	131.1
December	65.74	39.5	165.8	54.72	44.5	123.1	52.93	41.8	126.1	50.21	41.2	121.9	57.99	40.8	139.1	56.25	42.9	132.0
1948: January	62.72	38.2	164.6	51.08	42.1	121.4	51.79	41.1	126.0	49.60	40.4	122.7	59.59	41.2	141.9	52.52	40.4	131.1
February	58.22	36.0	161.3	50.65	41.7	121.4	51.33	40.8	125.8	50.11	40.8	123.0	57.20	40.0	138.8	51.88	40.0	130.1
March	55.54	34.8	159.9	51.42	42.2	121.9	50.60	40.4	125.1	49.84	40.6	122.9	57.54	40.1	140.7	51.82	40.3	128.6
April	56.54	35.3	160.3	50.59	41.7	121.4	50.16	39.9	125.6	49.60	40.4	122.8	58.16	40.5	141.3	52.34	40.8	128.6
May	61.15	37.4	163.6	50.61	41.7	121.4	50.34	40.0	126.0	50.19	40.3	124.4	58.35	40.2	143.0	52.36	40.8	128.6
June	63.96	38.8	165.1	50.69	41.7	121.5	51.15	40.2	127.2	50.92	40.3	126.2	57.73	39.7	143.4	52.11	40.9	128.0
July	66.30	39.3	168.4	52.12	42.3	123.1	51.07	39.4	129.6	49.90	39.3	127.0	56.68	39.7	144.8	51.89	40.6	128.2
August	68.20	39.5	173.0	52.53	41.5	126.6	53.71	40.9	131.9	51.28	40.3	127.2	58.83	40.0	146.1	52.30	40.4	128.6

NONMANUFACTURING

Mining

Year and month	Coal						Metal											
	Anthracite [3]			Bituminous [3]			Total: Metal			Iron			Copper			Lead and zinc		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$25.67	27.7	92.3	$23.88	27.1	88.6	$28.93	40.9	70.8	$26.36	35.7	73.8	$28.08	41.9	67.9	$26.39	38.7	68.2
1941: January	25.13	27.0	92.5	26.00	29.7	88.5	30.63	41.0	74.7	29.26	39.0	75.0	30.93	41.8	74.9	28.61	38.2	74.8
1947: August	68.51	38.5	178.0	70.23	39.1	178.7	56.09	41.4	135.4	54.09	40.0	135.2	60.01	43.8	136.9	54.75	39.8	137.6
September	67.37	38.2	176.5	71.19	39.1	181.9	57.01	41.6	137.0	54.12	39.6	136.8	61.57	44.2	139.3	56.67	41.0	138.3
October	71.40	40.0	178.4	71.91	39.9	179.8	57.39	42.3	135.6	55.11	40.7	135.5	60.78	44.8	135.7	57.48	41.5	138.6
November	63.43	36.2	175.4	71.77	38.5	185.1	57.55	41.7	138.0	54.83	39.9	137.6	60.49	44.0	137.5	58.58	41.4	141.6
December	67.42	38.4	175.6	75.22	41.2	182.6	58.11	42.7	136.0	54.26	40.3	134.6	62.39	45.5	137.0	60.83	43.3	140.6
1948: January	68.79	39.0	176.4	75.78	40.9	184.7	58.23	42.5	137.1	54.99	40.5	135.6	62.21	45.2	137.7	59.88	42.0	142.5
February	65.78	36.2	181.7	70.54	38.7	182.6	58.79	42.9	137.0	56.40	41.4	136.1	62.84	45.8	137.3	59.16	41.9	141.2
March	71.59	40.3	177.6	74.84	40.6	184.2	57.90	42.4	136.6	56.04	41.3	135.7	61.25	44.7	137.1	59.04	41.6	141.9
April	55.05	32.1	170.8	49.53	27.0	182.1	57.84	42.1	137.3	55.48	40.7	136.4	61.04	44.6	136.9	59.58	41.7	143.0
May	69.89	39.4	177.4	74.08	40.3	184.1	59.26	42.8	138.4	57.91	42.1	137.7	61.73	45.0	137.3	60.27	41.8	144.3
June	68.91	39.4	174.9	73.87	39.9	185.0	58.79	42.4	138.6	57.41	41.5	138.3	61.33	44.5	137.8	60.42	41.7	144.9
July	54.87	31.5	174.0	67.64	34.2	194.1	57.94	40.7	142.5	55.41	40.3	137.6	63.99	43.6	146.8	53.11	35.3	150.5
August	72.77	38.0	190.5	77.87	39.3	197.6	62.30	43.0	144.9	59.06	41.5	142.3	67.45	45.2	149.3	64.95	42.9	151.4

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

NONMANUFACTURING—Continued

Year and month	Mining—Continued						Public utilities											
	Quarrying and nonmetallic			Crude petroleum and natural gas production			Street railways and busses [4]			Telephone [5]			Telegraph [6]			Electric light and power		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
39: Average	$21.61	39.2	55.0	$34.09	38.3	87.3	$33.13	45.9	71.4	$31.94	39.1	82.2	-------	-------	-------	$34.38	39.6	86.9
41: January	22.06	38.2	57.6	33.99	37.7	88.5	33.63	45.3	73.1	32.52	39.7	82.4	-------	-------	-------	35.49	39.4	90.3
47: August	52.99	46.1	114.6	59.54	40.1	148.6	58.00	46.6	124.1	46.92	38.7	121.5	$55.01	44.8	122.8	57.97	42.4	137.8
September	53.45	46.1	115.6	61.37	40.3	151.0	58.57	46.1	126.5	48.02	39.1	123.0	54.95	44.5	123.4	58.29	42.0	139.0
October	54.44	46.4	116.9	60.51	40.0	149.4	58.69	45.7	126.5	48.77	39.3	124.1	54.92	44.8	122.7	58.44	42.1	139.2
November	53.08	44.6	117.8	62.94	40.9	155.4	58.27	45.4	127.6	49.44	39.5	125.4	55.10	44.0	125.3	60.33	42.4	142.8
December	52.39	44.4	117.6	60.90	39.5	154.3	60.11	46.8	128.8	47.83	39.0	122.9	55.14	43.9	125.7	59.01	42.2	141.4
48: January	50.92	42.7	118.7	64.53	39.9	162.7	60.73	46.3	129.9	48.20	38.9	124.1	55.81	44.4	125.7	59.87	42.4	142.6
February	50.39	42.1	119.9	65.77	40.4	163.8	62.15	47.7	129.5	47.82	38.7	123.8	56.26	44.5	126.5	59.60	42.2	142.8
March	51.04	42.9	119.0	63.44	39.7	160.5	61.36	47.3	129.5	47.31	38.7	122.3	56.19	44.4	126.7	58.27	41.6	140.8
April	52.83	43.7	120.6	63.96	40.0	159.9	60.10	46.6	129.3	47.56	38.8	122.5	59.45	44.1	134.9	59.10	41.8	142.7
May	54.73	44.4	122.6	65.88	40.2	164.6	60.32	46.8	130.2	48.82	39.4	124.0	62.12	45.0	138.1	59.83	41.7	144.4
June	55.38	45.0	122.8	64.88	39.5	163.6	61.21	46.8	131.5	48.67	39.5	123.2	61.63	45.1	136.7	60.41	41.8	145.5
July	55.83	44.1	125.5	67.17	40.1	167.6	62.01	46.6	133.4	49.21	39.8	123.7	63.10	45.8	137.9	61.46	41.8	148.3
August	58.55	45.7	127.1	69.59	41.3	168.2	62.68	47.6	132.8	48.40	39.3	123.2	62.59	45.6	137.3	61.46	42.1	147.5

Year and month	Trade																	
	Wholesale			Retail														
				Total: Retail			Food			General merchandise			Apparel			Furniture and house-furnishings		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
39: Average	$29.85	41.7	71.5	$21.17	43.0	53.6	$23.37	43.9	52.5	$17.80	38.8	45.4	$21.23	38.8	54.3	$28.62	44.5	66.0
41: January	30.59	40.6	75.6	21.53	42.9	54.9	23.78	43.6	53.7	18.22	38.8	46.6	21.89	39.0	56.0	27.96	43.9	66.6
47: August	52.05	41.1	125.8	38.14	41.0	100.3	45.37	42.1	104.3	32.50	37.2	85.9	36.74	37.1	99.4	49.41	42.6	119.4
September	53.65	41.2	128.1	37.06	40.0	101.2	44.15	40.1	105.1	31.85	36.3	85.4	37.02	36.9	101.1	50.23	42.6	121.5
October	53.68	41.3	128.9	36.74	40.0	101.3	44.08	40.2	105.8	31.59	36.1	86.0	37.20	36.8	102.3	51.43	42.4	124.3
November	54.70	41.4	131.4	37.14	39.5	102.5	44.92	39.6	108.6	31.15	35.5	85.6	37.40	36.5	102.7	52.13	42.5	125.5
December	54.97	41.6	130.0	37.36	39.7	101.6	44.74	39.9	107.9	31.87	36.0	85.3	38.18	37.2	102.4	53.79	43.2	128.8
48: January	54.36	41.0	130.9	37.62	39.8	104.4	45.46	39.9	110.8	32.09	35.9	88.9	37.68	36.9	100.7	50.62	42.3	125.4
February	55.87	41.1	134.3	38.33	40.0	105.0	46.33	39.7	111.9	32.09	35.7	88.3	37.94	37.3	100.2	53.05	43.9	125.3
March	55.17	40.9	133.4	38.89	39.8	104.4	46.14	39.5	112.3	32.28	35.3	87.8	37.50	36.2	102.5	51.30	43.7	124.2
April	55.84	41.0	134.6	39.27	39.8	105.5	46.66	39.2	115.0	33.17	35.3	89.5	38.23	36.6	103.0	50.24	43.5	126.1
May	56.61	41.2	136.3	39.84	39.9	106.4	47.08	39.6	114.8	34.04	35.2	90.7	38.54	36.5	104.0	50.96	43.4	128.1
June	56.00	41.1	135.3	40.52	40.3	107.0	48.52	40.6	115.9	35.04	35.8	91.5	39.33	36.9	104.9	50.86	43.4	128.1
July	56.54	41.2	136.5	41.19	40.8	107.7	49.44	41.0	116.2	35.67	36.5	91.5	39.48	37.2	104.5	51.27	43.3	128.4
August	57.51	41.3	137.9	41.19	41.0	108.0	49.35	41.1	116.0	35.85	36.5	91.4	39.17	37.1	104.3	51.33	43.7	128.0

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

NONMANUFACTURING—Continued

Year and month	Trade—Continued						Finance [2]		Service								
	Retail—Continued						Brokerage	Insurance	Hotels [3] (year-round)			Power laundries			Cleaning and dye		
	Automotive			Lumber and building materials													
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*					*Cents*			*Cents*			*Cents*
1939: Average	$27.07	47.6	57.1	$26.22	42.7	61.9	$36.63	$36.32	$15.25	46.6	32.4	$17.69	42.7	41.7	$19.96	41.8	
1941: January	28.26	46.8	60.6	26.16	41.7	63.4	38.25	37.52	15.65	45.9	33.8	18.37	42.9	42.9	19.92	41.9	
1947: August	51.50	45.5	115.2	48.49	43.0	112.2	58.42	52.55	29.50	45.0	66.0	32.79	42.2	77.1	35.86	40.8	
September	51.55	45.3	115.9	48.24	42.3	113.5	59.32	51.47	29.86	44.1	67.2	33.44	42.4	78.6	37.67	41.9	
October	52.37	45.7	116.5	48.70	42.9	113.6	61.38	51.96	30.45	44.0	68.4	32.97	42.3	78.7	37.70	41.5	
November	52.62	45.3	117.4	47.65	42.1	113.9	64.51	53.98	30.54	44.4	68.7	32.86	41.7	78.6	37.23	40.9	
December	52.71	45.5	116.8	49.03	42.7	114.3	62.85	53.92	30.89	44.1	69.3	33.88	42.6	79.7	37.70	41.5	
1948: January	51.66	44.4	117.9	48.19	41.8	115.4	62.35	55.09	30.55	43.9	69.5	33.99	42.3	80.7	37.64	41.4	
February	53.03	45.0	118.6	49.56	42.1	117.4	63.37	56.63	31.19	44.6	69.5	33.54	41.9	80.2	36.55	40.5	
March	52.98	44.6	120.2	49.24	42.5	117.0	62.60	55.51	30.96	44.0	69.5	33.74	42.0	80.5	37.96	41.5	
April	54.53	45.5	121.6	49.64	42.6	117.5	65.76	54.94	31.59	44.2	70.0	34.29	42.2	81.0	39.18	42.1	
May	54.49	45.5	122.0	50.32	42.8	119.3	71.15	56.22	31.70	44.2	*70.7	34.22	41.8	81.7	39.13	42.0	
June	54.65	45.5	122.1	51.08	43.2	120.2	69.35	54.75	31.88	44.1	*71.1	34.36	41.8	82.3	40.14	42.4	
July	55.03	45.1	123.7	51.31	42.8	121.6	68.12	55.22	32.04	44.0	71.4	34.55	42.2	82.0	39.02	41.7	
August	56.04	45.6	125.1	52.51	43.4	122.0	65.33	55.79	32.17	44.9	71.3	33.70	41.1	82.2	37.48	40.0	

[1] These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during the pay period ending nearest the 15th of the month. As not all reporting firms supply man-hour data, the average weekly hours and average hourly earnings for individual industries are based on a slightly smaller sample than are average weekly earnings.

For manufacturing, mining, power laundries, and cleaning and dyeing industries, the data relate to production and related workers only. For the remaining industries, unless otherwise noted, the data relate to all nonsupervisory employees and working supervisors. The size of the reporting sample, methods of computation, and additional tables on "real" and "net spendable" weekly earnings are contained in the Bureau's monthly mimeographed release, "Hours and Earnings—Industry Report," which is available upon request. Data for 1939 and January 1941, for some industries, are not strictly comparable with the periods currently presented. All series, by month, are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired. Data for the two current months are subject to revision without notation. Revised figures for earlier months are identified by an asterisk for the first month's publication of such data.

[2] New series beginning with month and year shown below; not comparable with data shown for earlier periods:

Glass products made from purchased glass.—May 1948; comparable April data are $44.36 and 112.1 cents.

Knitted cloth.—September 1947; comparable August data are 101.2 cents.

Jute goods, except felts.—September 1947; comparable August data are 89.1 cents.

[3] April 1948 data reflect work stoppages.

[4] Data include private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

[5] Prior to April 1945 the averages of hours and earnings related to all employees except executives; beginning with April 1945 these averages reflect mainly the hours and earnings of employees subject to the Fair Labor Standards Act. At the same time the reporting sample was expanded to include a greater number of employees of "long lines." The April 1945 data are $40.72, 42.9 hours, and 95.2 cents on the old basis, and $37.50, 40.6 hours, and 92.6 cents on the new basis.

[6] Data relate to all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

[7] Data on average weekly hours and average hourly earnings are not available.

[8] Money payments only; additional value of board, room, uniforms, and tips, not included.

*Revised.

ABLE C–2: Estimated Average Hourly Earnings, Gross and Exclusive of Overtime, of Production Workers in Manufacturing Industries [1]

[In cents]

Year and month	All manufacturing		Durable goods		Nondurable goods	
	Gross	Excluding overtime	Gross	Excluding overtime	Gross	Excluding overtime
nuary 1941	68.3	66.4	74.9	72.2	61.0	60.1
nuary 1945	104.6	97.0	114.4	105.3	89.1	84.0
ly 1945	103.3	96.9	112.7	105.2	90.2	85.4
ne 1946	108.4	105.3	116.5	113.4	100.3	97.2
1: Average	72.9	70.2	80.8	77.0	64.0	62.5
2: Average	85.3	80.5	94.7	88.1	72.3	69.8
3: Average	96.1	89.4	105.9	97.6	80.3	76.3
4: Average	101.9	94.7	111.7	102.9	86.1	81.4
5: Average	102.3	[2] 96.3	111.1	[2] 104.2	90.4	[2] 85.8
6: Average	108.4	104.9	115.6	112.2	101.2	97.8
7: Average	122.1	118.2	129.2	125.0	114.5	110.9

Year and month	All manufacturing		Durable goods		Nondurable goods	
	Gross	Excluding overtime	Gross	Excluding overtime	Gross	Excluding overtime
1947: August	123.6	120.1	131.2	127.5	115.8	112.4
September	124.9	120.9	133.1	128.9	116.5	112.7
October	125.8	121.6	133.7	129.2	117.5	113.7
November	126.8	122.7	134.6	130.2	118.5	114.7
December	127.8	122.8	135.4	129.9	119.6	115.2
1948: January	128.5	124.3	135.5	130.8	121.0	117.3
February	128.7	124.7	135.2	130.9	121.7	118.1
March	128.9	124.8	135.2	130.6	122.0	118.3
April	129.2	125.3	135.7	131.4	122.0	118.4
May	130.1	126.2	136.6	132.4	123.0	119.4
June	131.6	127.5	138.5	134.1	124.2	120.4
July [3]	133.3	129.6	140.8	137.0	125.2	121.6
August [3]	134.9	130.9	143.2	138.5	126.2	122.7

[1] Overtime is defined as work in excess of 40 hours a week and paid for at ne and one-half. The method of estimating average hourly earnings exclu- e of overtime makes no allowance for special rates of pay for work done on lidays.

[2] Eleven-month average only; August 1945 excluded because of VJ-day holiday period.

[3] Preliminary.

TABLE C–3: Average Earnings and Hours on Private Construction Projects, by Type of Firm [1]

Year and month	All types, private construction projects			Building construction													
				Total building			General contractors			Special building trades								
										All trades [2]			Plumbing and heating			Painting and decorating		
	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [3]	Average wkly. hours	Average hourly earnings
0: Average	(4)	(4)	(4)	$31.70	33.1	$0.958	[5] $30.56	[5] 33.3	[5] $0.918	$33.11	32.7	$1.012	$32.87	34.6	$0.949	$33.05	32.5	$1.016
1: January	(4)	(4)	(4)	32.18	32.6	.986	[5] 30.10	[5] 32.7	[5] .946	33.42	32.6	1.025	34.16	35.8	.955	31.49	29.7	1.062
7: August	$64.36	38.6	$1.668	64.71	38.2	1.694	61.33	38.0	1.614	69.01	38.5	1.794	69.60	38.9	1.791	66.32	37.4	1.774
September	65.09	38.3	1.697	65.36	37.9	1.723	61.16	37.2	1.646	70.61	38.9	1.816	71.19	39.1	1.819	66.13	37.4	1.767
October	66.03	38.5	1.716	66.36	38.1	1.743	62.25	37.4	1.665	71.32	38.9	1.833	71.98	39.2	1.836	67.29	37.6	1.792
November	64.02	36.9	1.736	64.55	36.6	1.765	60.55	35.8	1.690	69.36	37.5	1.851	71.90	38.4	1.872	63.56	35.0	1.818
December	66.47	38.0	1.748	67.31	37.9	1.774	62.86	37.1	1.695	72.64	38.9	1.865	76.61	40.6	1.887	65.33	36.0	1.812
8: January	65.73	37.3	1.762	66.28	37.2	1.781	62.05	36.4	1.707	71.43	38.2	1.868	75.79	40.7	1.862	65.79	35.7	1.840
February	66.17	37.0	1.788	66.31	36.7	1.806	62.70	36.3	1.727	70.99	37.3	1.899	74.17	39.1	1.895	65.03	34.7	1.872
March	66.73	37.4	1.786	66.89	37.1	1.805	63.28	36.7	1.724	71.47	37.5	1.905	74.01	39.0	1.897	66.80	35.7	1.870
April	67.25	37.5	1.795	67.31	37.0	1.818	63.62	36.5	1.745	72.08	37.7	1.909	74.64	38.9	1.919	68.29	36.3	1.880
May	67.90	37.5	1.812	68.13	37.1	1.835	64.74	36.5	1.772	72.67	37.9	1.916	75.55	39.1	1.933	69.76	36.6	1.906
June	70.57	38.5	1.835	70.49	37.9	1.858	67.00	37.4	1.789	75.14	38.6	1.948	79.03	40.0	1.976	70.27	36.4	1.930
July [6]	71.53	38.4	1.865	71.38	37.8	1.890	67.90	37.2	1.826	75.88	38.5	1.972	78.89	39.2	2.014	71.20	36.8	1.934
August [7]	72.07	38.3	1.880	72.09	37.8	1.906	68.54	37.4	1.835	76.77	38.4	1.997	80.30	39.1	2.053	71.37	36.6	1.948

See footnotes at end of table.

TABLE C–3: Average Earnings and Hours on Private Construction Projects, by Type of Firm [1]—Co

Year and month	Building construction—Continued																	
	Special building trades—Continued																	
	Electrical work			Masonry			Plastering and lathing			Carpentry			Roofing and sheet metal			Excavation and foundation		
	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings
1940: Average	$41.18	34.5	$1.196	$29.47	29.8	$0.988	$36.60	28.5	$1.286	$31.23	33.0	$0.947	$28.07	31.8	$0.883	$26.53	30.9	$0.
1941: January	43.18	36.5	1.184	25.66	25.3	1.012	35.36	27.5	1.287	30.40	31.2	.974	27.60	30.3	.910	23.86	29.1	.
1947: August	76.96	39.3	1.960	65.89	38.2	1.727	75.61	38.0	1.992	65.99	39.5	1.670	60.86	37.4	1.629	63.12	39.1	1.
September	79.92	40.3	1.985	66.68	38.1	1.752	76.05	38.1	1.995	65.75	39.0	1.684	63.27	37.9	1.669	64.27	39.8	1.
October	81.87	40.8	2.006	67.19	37.7	1.781	75.60	37.4	2.019	66.55	38.9	1.710	62.48	38.4	1.626	63.51	38.8	1.
November	79.64	39.9	1.995	65.39	36.0	1.817	73.27	35.3	2.075	66.50	38.4	1.733	57.76	35.4	1.631	60.08	36.7	1.
December	81.20	40.6	2.000	66.69	36.3	1.836	76.63	36.5	2.100	64.94	37.8	1.718	60.64	37.1	1.634	63.33	37.8	1.
1948: January	81.62	40.6	2.012	61.51	33.0	1.862	75.84	36.7	2.069	63.94	36.5	1.750	56.54	34.5	1.638	63.79	37.7	1.
February	82.10	40.0	2.052	59.50	31.6	1.881	74.81	35.9	2.087	61.60	35.2	1.752	55.38	33.7	1.643	64.37	37.3	1.
March	83.75	40.6	2.064	61.38	32.6	1.883	75.10	36.0	2.087	62.93	35.4	1.778	55.86	34.4	1.622	61.57	36.4	1.
April	81.76	39.7	2.061	64.61	34.3	1.885	76.61	36.6	2.094	68.41	38.0	1.799	58.33	35.3	1.652	63.40	37.9	1.
May	81.44	39.7	2.051	66.91	34.8	1.923	79.22	37.1	2.137	69.55	38.8	1.795	59.89	35.9	1.669	65.72	39.3	1.
June	82.60	39.8	2.075	71.21	36.2	1.967	83.54	38.2	2.185	70.64	39.4	1.794	63.15	36.8	1.717	68.45	40.4	1.
July [6]	84.31	40.3	2.090	74.78	37.8	1.977	83.12	37.4	2.223	70.28	39.2	1.795	64.62	37.1	1.736	66.63	38.6	1.
August [7]	85.33	40.1	2.129	74.70	37.0	2.107	81.59	36.7	2.222	70.35	39.2	1.796	65.37	37.6	1.737	69.21	39.5	1.

Year and month	Nonbuilding construction											
	Total nonbuilding			Highway and street			Heavy construction			Other		
	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings
1940: Average	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1941: January	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1947: August	$62.82	40.2	$1.562	$58.57	40.1	$1.459	$65.53	40.2	$1.632	$58.92	40.5	$1.
September	63.85	40.2	1.587	59.68	39.9	1.495	66.84	40.1	1.666	58.26	40.9	1.
October	64.53	40.3	1.602	60.66	40.2	1.510	67.11	40.0	1.676	60.08	41.1	1.
November	61.67	38.2	1.615	57.55	37.7	1.528	64.03	38.1	1.680	58.50	38.9	1.
December	62.83	38.4	1.638	60.21	38.4	1.570	65.24	38.4	1.697	58.35	38.2	1.
1948: January	63.28	37.8	1.676	61.25	37.9	1.618	65.57	37.6	1.745	58.14	38.1	1.
February	65.42	38.5	1.700	60.96	37.4	1.629	68.78	38.6	1.781	61.24	39.0	1.
March	65.85	38.9	1.692	60.71	37.7	1.609	68.79	39.3	1.750	62.89	38.9	1.
April	66.92	39.6	1.691	61.63	38.5	1.601	69.53	39.9	1.743	65.08	39.8	1.
May	66.72	39.1	1.706	63.09	38.8	1.627	69.30	39.4	1.760	63.86	38.8	1.
June	70.93	40.9	1.735	67.53	40.8	1.656	74.06	41.5	1.785	66.61	39.5	1.
July [6]	72.27	41.2	1.756	69.73	42.2	1.652	74.42	41.0	1.184	69.23	40.6	1.
August [7]	71.97	40.5	1.775	70.78	42.7	1.659	73.18	39.6	1.847	69.97	41.0	1.

[1] Covers all contract construction firms reporting to the Bureau during the months shown (over 14,000), but not necessarily identical establishments. The data include all employees of these construction firms working at the site of privately financed projects (skilled, semiskilled, unskilled, superintendents, time clerks, etc.). Employees of these firms engaged on publicly financed projects and off-site work are excluded.

[2] Includes types not shown separately.

[3] Hourly earnings, when multiplied by weekly hours of work, may not exactly equal weekly earnings because of rounding.

[4] Not available prior to February 1946.

[5] Includes general contracting as well as general building maintenance, and other special building data.

[6] Revised.

[7] Preliminary.

Prices and Cost of Living

TABLE D-1: Consumers' Price Index [1] for Moderate-Income Families in Large Cities, by Group of Commodities

[1935-39=100]

Year and month	All items	Food	Apparel	Rent	Fuel, electricity, and ice			Housefurnishings	Miscellaneous
					Total	Gas and electricity	Other fuels and ice		
Average	70.7	79.9	69.3	92.2	61.9	(2)	(2)	59.1	50.9
July	71.7	81.7	69.8	92.2	62.3	(2)	(2)	60.8	52.0
December	118.0	149.6	147.9	97.1	90.4	(2)	(2)	121.2	83.1
June	149.4	185.0	209.7	119.1	104.8	(2)	(2)	169.7	100.7
Average	122.5	132.5	115.3	141.4	112.5	(2)	(2)	111.7	104.6
Average	97.6	86.5	90.8	116.9	103.4	(2)	(2)	85.4	101.7
Average	99.4	95.2	100.5	104.3	99.0	98.9	99.3	101.3	100.7
August 15	98.6	93.5	100.3	104.3	97.5	99.0	96.3	100.6	100.4
Average	100.2	96.6	101.7	104.6	99.7	98.0	101.6	100.5	101.1
Average	105.2	105.5	106.3	106.2	102.2	97.1	107.4	107.3	104.0
January 1	100.8	97.6	101.2	105.0	100.8	97.5	104.0	100.2	101.8
December 15	110.5	113.1	114.8	108.2	104.1	96.7	111.3	116.8	107.7
Average	116.5	123.9	124.2	108.5	105.4	96.7	113.9	122.2	110.9
Average	123.6	138.0	129.7	108.0	107.7	96.1	119.0	125.6	115.8
Average	125.5	136.1	138.8	108.2	109.8	95.8	123.4	136.4	121.3
Average	128.4	139.1	145.9	108.3	110.3	95.0	125.1	145.8	124.1
August 15	129.3	140.9	146.4	(3)	111.4	95.2	127.2	146.0	124.5
Average	139.3	159.6	160.2	108.6	112.4	92.4	132.0	159.2	128.8
June 15	133.3	145.6	157.2	108.5	110.5	92.1	128.4	156.1	127.9
November 15	152.2	187.7	171.0	(3)	114.8	91.8	137.2	171.0	132.5
Average	159.2	193.8	185.8	111.2	121.1	92.0	149.5	184.4	139.9
September 15	163.8	203.5	187.6	113.6	124.6	92.1	156.3	187.5	140.8
October 15	163.8	201.6	189.0	114.9	125.2	92.2	157.4	187.8	141.8
November 15	164.9	202.7	190.2	115.2	126.9	92.5	160.5	188.9	143.0
December 15	167.0	206.9	191.2	115.4	127.8	92.6	162.0	191.4	144.4
January 15	168.8	209.7	192.1	115.9	129.5	93.1	165.0	192.3	146.4
February 15	167.5	204.7	195.1	116.0	130.0	93.2	165.9	193.0	146.4
March 15	166.9	202.3	196.3	116.3	130.3	93.8	166.0	194.9	146.2
April 15	169.3	207.9	196.4	116.3	130.7	93.9	166.7	194.7	147.8
May 15	170.5	210.9	197.5	116.7	131.8	94.1	168.6	193.6	147.5
June 15	171.7	214.1	196.9	117.0	132.6	94.2	170.1	194.8	147.5
July 15	173.7	216.8	197.1	117.3	134.8	94.4	174.2	195.9	150.8
August 15	174.5	216.6	199.7	117.7	136.8	94.5	178.1	196.3	152.4
September 15	174.5	215.2	201.0	118.5	137.3	94.6	178.9	198.1	152.7

[1] The "consumers' price index for moderate-income families in large cities," formerly known as the "cost of living index" measures average changes in retail prices of selected goods, rents, and services weighted by quantities bought in 1934-36 by families of wage earners and moderate-income workers in large cities whose incomes averaged $1,524 in 1934-36.

Bureau of Labor Statistics Bulletin 699, Changes in Cost of Living in Large Cities in the United States, 1913-41, contains a detailed description of methods used in constructing this index. Additional information on the consumers' price index is given in a compilation of reports published by the Office of Economic Stabilization, Report of the President's Committee on the Cost of Living.

Mimeographed tables are available upon request showing indexes for each of the cities regularly surveyed by the Bureau and for each of the major groups of living essentials. Indexes for all large cities combined are available since 1913. The beginning date for series of indexes for individual cities varies from city to city but indexes are available for most of the 34 cities since World War I.

[2] Data not available.

[3] Rents not surveyed this month.

TABLE D–2: Consumers' Price Index for Moderate-Income Families, by City,[1] for Selected Perio

[1935-39=100]

City	Sept. 15, 1948	Aug. 15, 1948	July 15, 1948	June 15, 1948	May 15, 1948	Apr. 15, 1948	Mar. 15, 1948	Feb. 15, 1948	Jan. 15, 1948	Dec. 15, 1947	Nov. 15, 1947	Oct. 15, 1947	Sept. 15, 1947	June 15, 1946	Aug. 1
Average	174.5	174.5	173.7	171.7	170.5	169.3	166.9	167.5	168.8	167.0	164.9	163.8	163.8	133.3	
Atlanta, Ga.	(2)	176.2	(2)	(2)	170.8	(2)	(2)	169.2	(2)	(2)	167.5	(2)	(2)	133.8	
Baltimore, Md.	179.2	(2)	(2)	176.1	(2)	(2)	170.9	(2)	(2)	171.3	(2)	(2)	167.8	135.6	
Birmingham, Ala.	178.6	179.3	177.0	174.7	173.7	172.7	172.0	172.8	174.4	173.8	171.6	169.7	169.1	136.5	
Boston, Mass.	169.0	168.7	168.6	166.1	164.1	163.6	160.8	161.3	163.1	160.4	158.3	157.5	158.6	127.9	
Buffalo, N. Y.	(2)	(2)	173.1	(2)	(2)	167.2	(2)	(2)	167.4	(2)	(2)	162.6	(2)	132.6	
Chicago, Ill.	179.4	178.8	178.6	176.2	174.9	172.1	169.0	168.8	171.5	170.1	168.3	167.3	168.3	130.9	
Cincinnati, Ohio	176.3	175.7	175.9	173.5	172.3	170.8	169.3	170.1	171.2	170.3	167.1	167.1	166.3	132.2	
Cleveland, Ohio	(2)	179.3	(2)	(2)	173.7	(2)	(2)	171.6	(2)	(2)	166.9	(2)	(2)	135.7	
Denver, Colo.	(2)	(2)	172.5	(2)	(2)	168.5	(2)	(2)	167.0	(2)	(2)	160.4	(2)	131.7	
Detroit, Mich.	175.4	176.1	175.9	174.5	173.2	171.8	168.7	169.0	170.6	169.0	166.6	166.7	164.2	136.4	
Houston, Tex.	175.4	175.2	173.7	172.5	171.5	171.4	170.0	170.4	170.8	169.3	165.8	163.4	162.1	130.5	
Indianapolis, Ind.	(2)	(2)	176.5	(2)	(2)	172.5	(2)	(2)	172.3	(2)	(2)	167.8	(2)	131.9	
Jacksonville, Fla.	179.1	(2)	(2)	178.3	(2)	(2)	172.8	(2)	(2)	173.9	(2)	(2)	168.5	138.4	
Kansas City, Mo.	(2)	(2)	166.3	(2)	(2)	163.3	(2)	(2)	162.4	(2)	(2)	157.9	(2)	129.4	
Los Angeles, Calif.	171.0	171.0	170.3	168.8	169.1	169.3	167.4	168.1	167.6	166.0	164.1	161.3	161.6	136.1	
Manchester, N. H.	(2)	(2)	178.1	(2)	(2)	172.0	(2)	(2)	172.5	(2)	(2)	166.1	(2)	134.7	
Memphis, Tenn.	177.1	(2)	(2)	174.7	(2)	(2)	172.4	(2)	(2)	173.5	(2)	(2)	169.0	134.5	
Milwaukee, Wis.	(2)	174.5	(2)	(2)	171.1	(2)	(2)	166.9	(2)	(2)	164.0	(2)	(2)	131.2	
Minneapolis, Minn.	173.8	(2)	(2)	171.4	(2)	(2)	167.7	(2)	(2)	166.2	(2)	(2)	162.1	129.4	
Mobile, Ala.	177.3	(2)	(2)	173.5	(2)	(2)	169.9	(2)	(2)	170.3	(2)	(2)	164.3	132.9	
New Orleans, La.	(2)	179.8	(2)	(2)	176.5	(2)	(2)	177.1	(2)	(2)	173.2	(2)	(2)	138.0	
New York, N. Y.	173.3	173.3	172.6	169.1	167.5	167.0	164.3	166.4	167.1	164.9	163.3	161.7	161.9	135.8	
Norfolk, Va.	(2)	176.2	(2)	(2)	171.9	(2)	(2)	170.1	(2)	(2)	168.2	(2)	(2)	135.2	
Philadelphia, Pa.	174.8	174.8	172.9	172.1	170.4	169.3	165.5	166.6	168.4	166.3	164.2	162.2	163.2	132.5	
Pittsburgh, Pa.	178.3	178.3	177.8	175.7	173.5	171.9	170.1	170.1	172.3	170.2	168.1	167.8	168.2	134.7	
Portland, Maine	170.7	(2)	(2)	167.4	(2)	(2)	162.7	(2)	(2)	162.0	(2)	(2)	159.2	128.7	
Portland, Oreg.	(2)	(2)	180.3	(2)	(2)	175.8	(2)	(2)	174.4	(2)	(2)	166.5	(2)	140.3	
Richmond, Va.	(2)	(2)	168.9	(2)	(2)	163.4	(2)	(2)	165.1	(2)	(2)	161.7	(2)	128.2	
St. Louis, Mo.	175.0	(2)	(2)	172.1	(2)	(2)	167.8	(2)	(2)	167.9	(2)	(2)	165.4	131.2	
San Francisco, Calif.	177.1	(2)	(2)	174.2	(2)	(2)	171.4	(2)	(2)	168.9	(2)	(2)	165.7	137.8	
Savannah, Ga.	(2)	(2)	180.2	(2)	(2)	177.6	(2)	(2)	175.6	(2)	(2)	171.5	(2)	140.6	
Scranton, Pa.	(2)	174.7	(2)	(2)	170.2	(2)	(2)	166.5	(2)	(2)	165.2	(2)	(2)	132.2	
Seattle, Wash.	(2)	176.2	(2)	(2)	174.3	(2)	(2)	170.7	(2)	(2)	166.2	(2)	(2)	137.0	
Washington, D. C.	(2)	169.2	(2)	(2)	166.7	(2)	(2)	163.2	(2)	(2)	161.7	(2)	(2)	133.8	

[1] The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

[2] Through June 1947, consumers' price indexes were computed monthly for 21 cities and in March, June, September, and December for 13 additional cities; beginning July 1947 indexes were computed monthly for 10 cities and once every 3 months for 24 additional cities according to a staggered schedule.

TABLE D–3: Consumers' Price Index for Moderate-Income Families, by City and Group of Commodities [1]

[1935–39=100]

City	Food		Apparel		Rent		Fuel, electricity, and ice						Housefurnishings		Miscellaneous	
							Total		Gas and electricity		Other fuels and ice					
	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948	Sept. 15 1948	Aug. 15 1948
rage	215.2	216.6	201.0	199.7	118.5	117.7	137.3	136.8	94.6	94.5	178.9	178.1	198.1	196.3	152.7	152.4
nta, Ga	214.2	215.7	(1)	206.7	(2)	120.0	148.2	148.2	76.9	76.9	213.7	213.8	(1)	200.6	(1)	155.1
timore, Md	228.7	228.9	200.8	(1)	115.6	(2)	148.0	148.1	121.3	121.8	169.5	169.3	203.5	(1)	149.0	(1)
mingham, Ala	216.3	219.3	209.0	207.0	(2)	138.7	135.6	135.6	79.6	79.6	177.3	177.3	192.1	192.3	149.3	149.3
ton, Mass	207.2	208.8	192.3	190.7	114.6	(2)	153.0	152.3	112.5	112.3	174.5	173.6	189.4	186.9	144.7	143.8
falo, N. Y	210.1	213.0	(1)	(1)	(2)	(2)	140.2	139.1	96.0	96.0	179.6	177.4	(1)	(1)	(1)	(1)
cago, Ill	221.4	223.6	203.6	200.6	133.7	(2)	131.5	131.0	83.5	83.5	181.4	180.6	183.4	180.4	154.8	152.7
cinnati, Ohio	218.0	218.1	198.1	197.5	114.1	(2)	141.8	141.1	95.1	95.1	186.4	185.0	190.3	189.6	153.9	153.0
veland, Ohio	225.6	229.0	(1)	196.3	(2)	124.3	144.7	143.6	105.6	105.6	182.0	179.9	(1)	184.0	(1)	152.2
nver, Colo	210.5	213.1	(1)	(1)	(2)	(2)	112.6	111.9	69.2	69.2	162.0	160.5	(1)	(1)	(1)	(1)
troit, Mich	207.6	210.1	198.5	197.8	(2)	(2)	150.6	149.7	87.3	86.7	198.7	197.4	206.4	207.6	166.5	166.1
uston, Tex	223.7	223.8	213.2	210.9	(2)	121.1	99.6	98.4	81.8	81.8	151.7	146.1	198.4	199.3	152.5	152.6
dianapolis, Ind	216.0	217.1	(1)	(1)	(2)	(2)	154.6	154.0	86.6	86.6	194.6	193.6	(1)	(1)	(1)	(1)
cksonville, Fla	219.3	220.7	197.7	(1)	127.1	(2)	146.9	147.3	100.2	100.2	187.4	188.1	186.3	(1)	160.1	(1)
nsas City, Mo	204.4	205.4	(1)	(1)	(2)	(2)	127.6	127.6	66.7	66.7	183.2	183.2	(1)	(1)	(1)	(1)
Angeles, Calif	212.1	212.7	194.5	194.8	(2)	123.9	94.0	94.0	89.3	89.3	116.4	116.4	189.0	187.0	152.1	151.7
nchester, N. H	215.5	217.8	(1)	(1)	(2)	(2)	155.7	155.7	94.6	94.6	186.2	186.2	(1)	(1)	(1)	(1)
mphis, Tenn	227.8	227.1	210.5	(1)	128.0	(2)	135.0	134.9	77.0	77.0	167.1	166.9	180.7	(1)	141.4	(1)
lwaukee, Wis	216.3	218.8	(1)	200.8	(2)	116.7	145.5	145.2	104.5	104.5	173.8	173.2	(1)	196.4	(1)	148.7
nneapolis, Minn	206.0	209.2	205.9	(1)	126.6	(2)	139.6	139.5	75.8	75.8	180.9	180.8	195.2	(1)	159.9	(1)
bile, Ala	222.1	222.7	206.7	(1)	125.5	(2)	129.8	129.4	84.0	84.0	165.5	164.7	178.6	(1)	145.1	(1)
w Orleans, La	227.7	228.5	(1)	209.1	(2)	112.1	113.0	113.0	75.1	75.1	153.2	153.2	(1)	192.7	(1)	144.7
w York, N. Y	216.2	216.9	202.9	200.3	(2)	(2)	133.3	132.9	100.6	100.5	183.4	182.5	187.5	186.7	157.0	157.7
rfolk, Va	220.2	220.5	(1)	196.3	(2)	115.2	147.8	147.8	97.8	97.8	187.1	187.1	(1)	195.3	(1)	150.2
iladelphia, Pa	212.0	212.5	195.0	194.2	(2)	119.2	142.6	142.6	103.0	103.0	173.1	173.1	204.6	202.7	150.0	149.7
tsburgh, Pa	219.5	220.9	232.8	229.1	(2)	(2)	138.8	138.8	103.4	103.4	199.7	199.7	205.0	203.7	146.6	146.5
rtland, Maine	207.0	209.8	200.6	(1)	112.4	(2)	154.4	150.7	108.5	108.5	176.8	171.3	191.2	(1)	151.0	(1)
rtland, Oreg	231.4	234.1	(1)	(1)	(2)	(2)	129.3	127.8	95.3	94.9	171.0	168.1	(1)	(1)	(1)	(1)
chmond, Va	214.1	211.7	(1)	(1)	(2)	(2)	142.3	142.3	95.6	95.6	170.8	170.8	(1)	(1)	(1)	(1)
Louis, Mo	223.0	225.3	202.2	(1)	119.6	(2)	138.3	138.3	94.1	94.1	177.4	177.4	174.8	(1)	144.9	(1)
n Francisco, Calif	224.2	224.3	196.7	(1)	115.3	(2)	83.1	83.1	72.7	72.7	126.9	126.9	165.2	(1)	162.4	(1)
vannah, Ga	222.4	223.3	(1)	(1)	(2)	(2)	155.8	153.3	101.5	91.2	187.5	189.4	(1)	(1)	(1)	(1)
anton, Pa	213.2	217.3	(1)	205.2	(2)	108.1	144.7	144.5	91.8	91.8	177.0	176.7	(1)	184.5	(1)	141.1
attle, Wash	221.0	221.9	(1)	195.5	(2)	122.2	124.2	124.2	91.5	91.5	151.4	151.4	(1)	197.2	(1)	154.7
shington, D. C	212.9	214.9	(1)	219.8	(2)	103.5	137.3	136.9	98.6	98.6	163.1	162.5	(1)	201.1	(1)	152.1

[1] Prices of apparel, housefurnishings, and miscellaneous goods and services are obtained monthly in 10 cities and once every 3 months in 24 additional cities according to a staggered schedule.

[2] Rents are surveyed every 3 months in 34 large cities according to a staggered schedule.

TABLE D–4: Indexes of Retail Prices of Foods,[1] by Group, for Selected Periods

[1935–39=100]

Year and month	All foods	Cereals and bakery products	Meats, poultry, and fish	Meats				Chickens	Fish	Dairy products	Eggs	Fruits and vegetables				Beverages	Fats and oils	Sugar and sweets
				Total	Beef and veal	Pork	Lamb					Total	Fresh	Canned	Dried			
1923: Average	124.0	105.5	101.2	------	------	------	------	------	------	129.4	136.1	169.5	173.6	124.8	175.4	131.5	126.2	17
1926: Average	137.4	115.7	117.8	------	------	------	------	------	------	127.4	141.7	210.8	226.2	122.9	152.4	170.4	145.0	12
1929: Average	132.5	107.6	127.1	------	------	------	------	------	------	131.0	143.8	169.0	173.5	124.3	171.0	164.8	127.2	11
1932: Average	86.5	82.6	79.3	------	------	------	------	------	------	84.9	82.3	103.5	105.9	91.1	91.2	112.6	71.1	8
1939: Average	95.2	94.5	96.6	96.6	101.1	88.9	99.5	93.8	101.0	95.9	91.0	94.5	95.1	92.3	93.3	95.5	87.7	10
August	93.5	93.4	95.7	95.4	99.6	88.0	98.8	94.6	99.6	93.1	90.7	92.4	92.8	91.6	90.3	94.9	84.5	9
1940: Average	96.6	96.8	95.8	94.4	102.8	81.1	99.7	94.8	110.6	101.4	93.8	96.5	97.3	92.4	100.6	92.5	82.2	10
1941: Average	105.5	97.9	107.5	106.5	110.8	100.1	106.6	102.1	124.5	112.0	112.2	103.2	104.2	97.9	106.7	101.5	94.0	10
December	113.1	102.5	111.1	109.7	114.4	103.2	108.1	100.5	138.9	120.5	138.1	110.5	111.0	106.3	118.3	114.1	108.5	11
1942: Average	123.9	105.1	126.0	122.5	123.6	120.4	124.1	122.6	163.0	125.4	136.5	130.8	132.8	121.6	136.3	122.1	119.6	12
1943: Average	138.0	107.6	133.8	124.2	124.7	119.9	136.9	146.1	206.5	134.6	161.9	168.8	178.0	130.6	158.9	124.8	126.1	12
1944: Average	136.1	108.4	129.9	117.9	118.7	112.2	134.5	151.0	207.6	133.6	153.9	168.2	177.2	129.5	164.5	124.3	123.3	12
1945: Average	139.1	109.0	131.2	118.0	118.4	112.6	136.0	154.4	217.1	133.9	164.4	177.1	188.2	130.2	168.2	124.7	124.0	12
August	140.9	109.1	131.8	118.1	118.5	112.6	136.4	157.3	217.8	133.4	171.4	183.5	196.2	130.3	168.6	124.7	124.0	12
1946: Average	159.6	125.0	161.3	150.8	150.5	148.2	163.9	174.0	236.2	165.1	168.8	182.4	190.7	140.8	190.4	139.6	152.1	14
June	145.6	122.1	134.0	120.4	121.2	114.3	139.0	162.8	219.7	147.8	147.1	183.5	196.7	127.5	172.5	125.4	126.4	13
November	187.7	140.6	203.6	197.9	191.0	207.1	205.4	188.9	265.0	198.5	201.6	184.5	182.3	167.7	251.6	167.8	244.4	17
1947: Average	193.8	155.4	217.1	214.7	213.6	215.9	220.1	183.2	271.4	186.2	200.8	199.4	201.5	166.2	263.5	186.8	197.5	18
September	203.5	157.8	240.6	241.9	239.7	245.9	244.0	191.4	275.7	195.2	235.9	198.2	202.4	157.3	261.2	187.0	176.6	18
October	201.6	160.3	235.5	234.9	233.6	240.9	226.2	189.5	286.5	190.1	232.7	196.6	201.1	155.2	255.6	190.8	190.0	18
November	202.7	167.9	227.0	223.6	226.3	219.7	227.1	184.6	302.4	198.4	224.7	199.6	205.0	156.5	251.7	194.7	196.4	18
December	206.9	170.5	227.3	223.2	227.6	218.2	221.5	190.7	302.3	204.9	236.1	205.3	212.1	157.3	255.4	198.5	208.2	18
1948: January	209.7	172.7	237.5	233.4	239.7	225.9	231.5	200.0	310.9	205.7	213.6	208.3	215.7	158.0	256.8	201.9	209.3	18
February	204.7	171.8	224.8	218.0	228.2	202.2	223.4	196.4	315.0	204.4	189.2	213.0	222.0	157.7	256.0	204.0	194.2	17
March	202.3	171.0	224.7	218.2	228.5	204.3	216.8	194.7	313.6	201.1	186.3	206.9	214.2	157.7	253.9	204.4	191.7	17
April	207.9	171.0	233.8	229.5	241.2	212.3	232.6	198.4	307.2	205.8	184.7	217.4	228.4	156.4	252.1	204.4	191.4	17
May	210.9	171.1	244.2	242.0	255.8	219.1	253.5	202.1	305.0	204.8	184.9	218.0	229.4	156.4	250.0	204.6	196.6	17
June	214.1	171.2	255.1	255.2	273.9	223.5	271.2	207.6	299.3	205.9	194.2	214.9	225.2	157.4	248.0	205.1	200.5	17
July	216.8	171.0	261.8	263.0	280.9	233.8	275.0	209.3	301.6	209.0	204.3	213.4	223.2	157.7	248.0	205.2	200.8	17
August	216.6	170.8	267.0[1]	269.3	286.2	246.1	266.6	207.8	304.4	211.0	220.2	199.6	204.8	157.8	249.2	205.3	197.8	17
September	215.2	170.7	265.3	265.9	280.8	247.9	256.6	209.4	314.9	208.7	226.6	195.8	199.6	159.0	249.1	205.6	196.8	17

[1] The Bureau of Labor Statistics retail food prices are obtained monthly during the first three days of the week containing the fifteenth of the month, through voluntary reports from chain and independent retail food dealers. Articles included are selected to represent food sales to moderate-income families.

The indexes, based on the retail prices of 50 foods, are computed by the fixed-base-weighted-aggregate method, using weights representing (1) relative importance of chain and independent store sales, in computing city average prices; (2) food purchases by families of wage earners and moderate-income workers, in computing city indexes; and (3) population weights, in combining city aggregates in order to derive average prices and indexes for all cities combined.

Indexes of retail food prices in 56 large cities combined, by commodity groups, for the years 1923 through 1945 (1935–39=100), may be found in Bulletin No. 899, "Retail Prices of Food—1944 and 1945," Bureau of Labor Statistics, U. S. Department of Labor, table 2, p. 4. Mimeographed tables of the same data, by months, January 1935 to date, are available upon request.

TABLE D–5: Indexes of Retail Prices of Foods, by City

[1935–39=100]

City	Sept. 1948	Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	Dec. 1947	Nov. 1947	Oct. 1947	Sept. 1947	June 1946	Aug. 1939
ited States	215.2	216.6	216.8	214.1	210.9	207.9	202.3	204.7	209.7	206.9	202.7	201.6	203.5	145.6	93.5
anta, Ga	214.2	215.7	212.4	209.9	207.9	204.7	201.1	205.6	211.9	211.1	206.9	211.1	209.4	141.0	92.5
ltimore, Md	228.7	228.9	227.7	225.3	221.6	217.8	212.3	214.5	220.2	217.8	211.8	211.5	212.8	152.4	94.7
rmingham, Ala	216.3	219.3	218.0	212.7	209.6	207.5	207.2	211.1	218.0	217.0	212.7	210.7	210.9	147.7	90.7
ston, Mass	207.2	208.8	210.2	204.1	199.2	198.2	192.2	195.0	200.3	195.7	192.4	191.8	195.3	138.0	93.5
dgeport, Conn	212.7	214.6	214.4	210.3	207.5	201.4	195.6	197.5	204.5	199.0	196.5	195.6	196.8	139.1	93.2
ffalo, N. Y	210.1	213.0	212.9	211.6	207.9	200.2	196.6	196.7	202.1	200.3	194.8	193.3	196.5	140.2	94.5
tte, Mont	214.5	215.1	216.6	214.7	207.4	201.3	200.5	202.1	204.8	195.8	194.2	195.0	195.7	139.7	94.1
dar Rapids, Iowa [1]	220.2	222.2	224.4	224.3	219.7	217.0	208.2	208.9	214.6	213.0	209.1	208.7	212.0	148.2	----
arleston, S. C	207.7	208.0	211.4	208.1	206.7	204.8	199.1	200.2	206.6	203.1	198.9	201.4	198.0	140.8	95.1
icago, Ill	221.4	223.6	224.7	221.3	218.4	212.2	204.3	204.8	213.2	210.5	207.8	207.1	211.0	142.8	92.3
ncinnati, Ohio	218.0	218.1	220.4	216.3	213.5	210.1	206.1	209.0	213.0	211.6	204.2	206.9	206.7	141.4	90.4
veland, Ohio	225.6	229.0	226.2	223.7	218.0	213.0	209.3	212.5	217.6	212.3	206.1	208.7	211.0	149.3	93.6
lumbus, Ohio	200.8	202.2	201.9	199.2	195.3	193.1	190.8	192.6	196.7	194.4	190.1	192.0	190.0	136.4	88.1
llas, Tex	217.3	215.2	213.3	210.8	210.5	206.7	203.0	205.7	210.3	208.2	204.4	201.6	200.3	142.4	91.7
nver, Colo	210.5	213.1	217.0	216.5	213.3	208.5	202.3	203.4	208.6	205.6	201.0	197.2	199.0	145.3	92.7
troit, Mich	207.6	210.1	213.2	211.3	208.0	203.9	197.7	199.4	205.1	202.0	196.7	199.0	197.4	145.4	90.6
ll River, Mass	211.6	213.5	214.1	211.3	207.2	201.2	197.2	198.4	202.6	199.0	195.0	195.6	195.8	138.1	95.4
uston, Tex	223.7	223.8	222.1	220.0	218.1	219.3	216.0	218.1	221.5	218.1	210.2	208.7	206.4	144.0	97.8
dianapolis, Ind	216.0	217.1	212.6	211.5	208.0	205.7	203.8	204.2	208.2	208.8	204.3	204.5	203.0	141.5	90.7
ckson, Miss. [1]	220.7	220.6	220.8	216.7	218.0	218.3	214.6	221.3	223.3	223.2	213.1	212.6	212.0	150.6	----
cksonville, Fla	219.3	220.7	222.8	222.9	217.3	214.7	208.1	212.2	216.2	216.6	211.0	214.7	209.1	150.8	95.8
nsas City, Mo	204.4	205.4	204.4	204.4	202.2	197.9	193.0	192.5	199.4	197.3	194.2	193.5	193.5	134.8	91.5
oxville, Tenn. [1]	241.6	244.6	241.7	238.4	236.2	233.9	230.0	239.6	244.3	243.5	235.6	236.9	235.9	165.6	----
tle Rock, Ark	212.0	212.4	213.4	210.0	209.2	206.4	203.8	206.1	211.4	211.8	200.4	200.4	201.3	139.1	94.0
s Angeles, Calif	212.1	212.7	213.1	212.1	212.6	213.9	208.2	210.9	212.2	211.1	206.7	201.9	204.2	154.8	94.6
uisville, Ky	207.2	207.4	206.8	203.8	201.6	198.2	193.9	198.0	200.1	198.9	195.8	196.2	198.2	135.6	92.1
anchester, N. H	215.5	217.8	218.4	213.0	208.9	204.9	202.0	203.2	208.8	204.7	199.0	198.0	201.3	144.4	94.9
emphis, Tenn	227.8	227.1	229.8	226.7	223.2	222.2	219.9	224.5	230.7	229.7	226.2	223.6	220.5	153.6	89.7
lwaukee, Wis	216.3	218.8	218.3	215.3	213.7	210.9	204.6	203.4	206.4	204.6	200.7	197.6	200.1	144.3	91.1
nneapolis, Minn	206.0	209.2	208.2	206.2	206.0	203.0	198.1	197.2	202.6	199.3	193.7	194.6	197.2	137.5	95.0
obile, Ala	222.1	222.7	222.5	219.8	217.0	216.3	212.2	215.5	219.6	216.3	206.8	209.3	206.8	149.8	95.5
wark, N. J	211.1	212.6	212.8	209.9	204.7	203.0	196.4	200.3	201.4	199.4	197.4	194.6	196.8	147.9	95.6
w Haven, Conn	205.3	205.6	208.3	205.4	201.2	197.7	193.0	195.8	201.5	198.9	193.4	193.8	196.1	140.4	93.7
w Orleans, La	227.7	228.5	233.2	227.3	223.0	228.7	224.3	225.6	226.4	222.1	220.2	219.5	216.8	157.6	97.6
w York, N. Y	216.2	216.9	217.9	213.9	210.0	208.6	201.2	206.7	209.7	206.1	203.9	200.6	203.0	149.2	95.8
rfolk, Va	220.2	220.5	216.9	214.4	213.3	210.5	206.0	210.2	216.5	216.1	210.6	214.3	210.7	146.0	93.6
maha, Nebr	210.3	211.1	208.6	210.1	207.2	202.5	197.7	197.7	204.2	202.6	198.1	195.6	197.9	139.5	92.3
oria, Ill	230.3	230.8	224.9	227.3	223.8	217.0	205.8	208.9	219.5	224.1	220.3	212.3	212.9	151.3	93.4
iladelphia, Pa	212.0	212.5	210.9	209.4	205.0	202.8	196.3	199.3	205.6	201.8	197.5	196.2	199.8	143.5	93.0
ttsburgh, Pa	219.5	220.9	222.3	219.6	213.7	209.8	204.8	205.4	212.8	209.6	205.2	206.1	209.8	147.1	92.5
rtland, Maine	207.0	209.8	209.7	204.1	199.4	197.0	192.4	193.5	199.6	195.2	190.7	190.9	193.6	138.4	95.9
rtland, Oreg	231.4	234.1	233.7	228.2	229.5	223.2	220.4	219.2	223.0	219.0	214.2	208.7	209.9	158.4	96.1
ovidence, R. I	223.8	227.2	224.9	222.0	217.9	213.1	205.5	210.5	215.0	210.5	206.1	206.5	208.2	144.9	93.7
chmond, Va	214.1	211.7	209.4	205.3	203.4	200.6	197.6	201.3	209.1	207.6	201.0	205.1	203.8	138.4	92.2
chester, N. Y	207.3	209.7	211.2	208.8	205.1	200.8	196.7	196.9	202.1	200.1	194.9	192.3	195.5	142.5	92.3
. Louis, Mo	223.0	225.3	224.2	222.0	218.2	213.6	210.9	212.8	217.2	215.2	209.9	209.4	215.9	147.4	93.8
. Paul, Minn	203.1	204.5	204.7	203.7	203.5	200.5	195.3	194.0	198.6	195.9	191.2	191.0	192.1	137.3	94.3
lt Lake City, Utah	214.7	216.0	217.1	215.8	216.8	212.9	207.3	207.9	211.3	209.7	202.6	199.4	200.7	151.7	94.6
n Francisco, Calif	224.2	224.3	223.2	221.6	223.4	219.5	215.3	215.4	218.9	215.7	214.4	208.8	210.4	155.5	93.8
vannah, Ga	222.4	223.3	228.3	224.5	223.3	221.4	213.6	219.6	222.9	222.2	217.5	219.2	220.3	158.5	96.7
anton, Pa	213.2	217.3	218.2	216.1	212.2	208.9	201.8	203.2	213.1	210.0	202.8	199.1	206.6	144.0	92.1
attle, Wash	221.0	221.9	223.4	220.3	221.4	215.5	212.5	214.7	218.4	213.4	207.6	205.4	206.0	151.6	94.5
ringfield, Ill	226.4	227.0	224.9	224.4	219.3	212.6	209.1	211.4	217.9	217.3	213.2	213.6	217.1	150.1	94.1
ashington, D. C	212.9	214.9	215.1	215.4	209.7	205.1	198.9	202.0	209.5	207.4	202.0	200.9	202.9	145.5	94.1
chita, Kans [1]	223.0	224.7	226.7	226.4	225.3	220.3	215.9	215.1	222.4	221.6	215.1	213.8	213.8	154.4	----
nston-Salem, N. C. [1]	215.6	215.8	212.9	209.5	208.4	206.0	202.7	207.9	214.5	211.3	207.1	208.4	205.8	145.3	----

[1] June 1940=100.

TABLE D–6: Average Retail Prices and Indexes of Selected Foods

Commodity	Average price Sept. 1948	Indexes 1935-39=100												
		Sept. 1948	Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	Dec. 1947	Nov. 1947	Oct. 1947	Sept. 1947
Cereals and bakery products:														
Cereals:	*Cents*													
Flour, wheat ..... 5 pounds	47.8	184.9	185.7	186.9	188.4	189.4	189.6	192.4	197.3	210.9	209.6	204.8	194.0	189.2
Corn flakes ..... 11 ounces	16.7	177.1	177.1	176.8	177.2	175.7	175.8	173.3	172.8	172.9	169.3	164.3	157.9	151.7
Corn meal ..... pound	11.0	214.0	215.2	215.5	213.7	215.7	216.4	216.6	219.9	219.9	218.1	217.5	211.9	204.5
Rice [1] ..... do	21.6	121.1	121.5	120.6	119.6	118.6	118.4	118.1	118.4	117.3	116.9	116.8	114.0	111.5
Rolled oats [2] ..... 20 ounces	17.1	155.6	155.4	155.2	155.0	154.8	154.8	153.5	153.4	153.6	152.6	151.1	143.4	135.6
Bakery products:														
Bread, white ..... pound	13.9	163.1	163.1	163.1	163.5	163.5	163.2	163.1	163.1	162.3	159.8	157.5	149.3	147.9
Vanilla cookies ..... do	44.4	192.4	191.7	192.1	190.3	188.8	189.2	187.9	187.7	183.7	180.2	178.7	176.2	176.3
Meats, poultry, and fish:														
Meats:														
Beef:														
Round steak ..... do	98.9	292.5	299.5	294.4	287.6	267.3	250.7	234.0	231.4	248.4	236.4	234.2	243.8	256.4
Rib roast ..... do	79.9	277.6	283.1	276.6	266.7	249.9	238.2	227.0	227.9	242.3	231.7	229.9	237.0	241.7
Chuck roast ..... do	70.7	315.0	322.2	315.5	309.6	283.4	263.3	249.6	250.6	263.1	251.5	253.5	260.1	258.9
Hamburger [3] ..... do	61.6	199.2	202.5	199.3	194.7	178.6	166.3	158.0	157.3	159.7	151.5	150.3	154.4	155.8
Veal:														
Cutlets ..... do	103.1	258.5	259.6	256.1	252.5	245.6	234.9	226.8	228.0	230.0	213.1	211.8	217.7	222.6
Pork:														
Chops ..... do	91.8	278.6	276.5	252.7	238.1	233.5	223.2	212.1	200.1	219.4	206.2	214.7	248.8	257.9
Bacon, sliced ..... do	79.0	207.2	206.3	204.5	201.9	199.1	191.3	185.7	194.7	227.7	228.8	227.6	230.4	224.7
Ham, whole ..... do	74.4	253.3	251.1	244.2	231.2	223.7	220.9	213.6	212.0	234.8	223.3	218.2	244.2	256.7
Salt pork ..... do	40.9	196.1	194.1	196.0	196.6	203.5	209.9	214.7	238.2	259.6	275.3	265.6	243.7	227.7
Lamb:														
Leg ..... do	74.0	260.7	270.8	279.4	275.6	257.6	236.3	220.3	226.9	235.2	225.0	230.7	229.8	247.9
Poultry: Roasting chickens ..... do	63.2	209.4	207.8	209.3	207.6	202.1	198.4	194.7	196.4	200.0	190.7	184.6	189.5	191.4
Fish:														
Fish (fresh, frozen) [2] ..... do	(4)	264.0	254.4	253.9	251.8	261.3	264.9	274.4	276.3	270.5	260.7	262.3	248.8	242.7
Salmon, pink [2] ..... 16-ounce can	56.3	429.2	417.1	408.1	405.2	399.7	397.1	394.1	393.7	394.9	391.0	386.7	365.6	342.2
Dairy products:														
Butter ..... pound	84.7	232.7	245.6	252.0	249.8	254.2	255.4	237.4	248.4	258.1	262.0	242.2	222.4	251.7
Cheese ..... do	68.7	264.1	268.6	262.1	254.6	248.1	241.5	243.7	247.9	242.2	236.1	230.9	226.2	221.0
Milk, fresh (delivered) ..... quart	22.7	185.4	182.0	177.1	174.0	171.5	174.3	174.6	174.3	173.3	171.2	171.0	167.5	163.0
Milk, fresh (grocery) ..... do	21.4	189.4	187.8	182.1	179.3	177.3	179.0	179.5	179.7	178.5	176.3	175.2	171.8	167.2
Milk, evaporated ..... 14½-ounce can	15.8	220.8	218.3	212.8	210.9	202.1	197.2	197.1	195.8	189.6	186.4	182.3	177.2	175.3
Eggs: Eggs, fresh ..... dozen	78.4	226.6	220.2	204.3	194.2	184.9	184.7	186.3	189.2	213.6	236.1	224.7	232.7	235.9
Fruits and vegetables:														
Fresh fruits:														
Apples ..... pound	11.3	216.7	225.1	265.3	269.2	229.1	208.2	205.6	208.6	219.2	221.8	214.3	216.1	219.7
Bananas ..... do	16.3	269.3	270.7	269.3	261.7	257.8	256.3	255.3	257.4	257.9	257.8	256.9	254.6	252.3
Oranges, size 200 ..... dozen	52.9	187.2	183.3	169.2	155.1	149.2	142.9	145.1	135.9	133.5	133.4	147.9	172.2	174.1
Fresh vegetables:														
Beans, green ..... pound	18.7	172.0	176.0	187.7	185.1	229.1	229.5	191.2	257.2	199.9	186.7	237.1	215.4	157.4
Cabbage ..... do	5.2	136.5	139.2	155.1	180.3	202.3	250.5	174.8	191.5	222.9	237.2	192.9	165.3	170.0
Carrots ..... bunch	10.2	190.8	183.6	202.1	263.2	310.1	254.3	227.8	261.3	246.3	311.3	261.3	241.8	205.7
Lettuce ..... head	12.9	156.2	143.1	177.8	164.1	200.7	159.9	138.0	153.5	201.0	179.9	170.8	151.6	189.1
Onions ..... pound	6.4	154.2	176.3	251.9	262.4	291.0	440.9	386.2	364.8	285.6	260.7	229.3	194.5	188.9
Potatoes ..... 15 pounds	75.7	210.8	223.5	248.4	263.5	261.7	253.6	247.0	246.9	234.4	222.5	211.1	201.7	202.7
Spinach ..... pound	13.2	183.9	205.0	174.7	145.0	158.4	167.4	171.5	221.5	191.4	167.5	154.1	172.2	195.5
Sweetpotatoes ..... do	10.2	196.2	235.5	286.9	273.4	225.2	213.1	208.3	207.2	196.4	183.9	173.3	174.2	195.8
Canned fruits:														
Peaches ..... No. 2½ can	31.8	165.1	163.0	161.6	160.8	160.8	160.6	161.0	161.5	162.4	161.9	162.1	162.4	163.8
Pineapple ..... do	38.0	174.4	170.0	168.5	168.1	166.7	166.3	164.3	163.0	162.1	160.1	158.2	154.6	152.8
Canned vegetables:														
Corn ..... No. 2 can	19.8	159.3	158.8	158.6	158.2	157.9	156.6	156.9	157.0	156.6	155.5	152.5	149.8	146.9
Peas ..... do	15.3	116.9	115.8	113.5	112.8	112.3	113.5	115.5	118.0	118.0	117.9	117.9	118.0	116.9
Tomatoes ..... do	16.5	183.2	182.6	184.7	184.8	183.0	183.2	186.2	185.0	185.9	185.5	185.4	183.9	191.8
Dried fruits: Prunes ..... pound	20.9	205.6	204.7	204.9	204.3	206.9	208.6	211.2	216.0	217.8	219.4	219.0	228.7	236.8
Dried vegetables: Navy beans ..... do	22.9	311.5	312.9	309.7	310.5	311.6	314.3	314.9	312.9	311.9	306.0	297.5	292.3	294.2
Beverages: Coffee ..... do	51.6	205.2	204.9	204.8	204.7	204.2	204.0	204.0	203.6	201.5	198.1	194.3	190.5	186.6
Fats and oils:														
Lard ..... do	29.6	198.5	197.3	198.1	198.5	198.2	194.1	191.9	196.0	238.8	242.7	228.6	215.9	181.3
Hydrogenated veg. shortening [7] ..... do	43.0	207.3	209.6	220.3	218.2	211.4	207.1	214.4	217.6	225.8	220.0	197.7	191.5	190.9
Salad dressing ..... pint	40.8	168.6	168.3	168.4	167.1	164.4	159.8	159.0	158.8	156.1	152.4	150.2	149.7	150.3
Oleomargarine ..... pound	41.9	229.8	235.3	240.1	242.0	232.6	223.9	224.0	227.8	230.5	228.9	214.4	208.9	198.0
Sugar and sweets:														
Sugar ..... do	9.3	174.0	173.2	171.8	171.4	173.8	174.5	175.3	177.7	184.3	184.6	184.1	182.7	182.0

[1] July 1947=100.
[2] Index not computed.
[3] February 1943=100.
[4] Not priced in earlier period.
[5] 1938-39=100.
[6] Average price not computed.
[7] Formerly published as shortening in other containers.

TABLE D–7: Indexes of Wholesale Prices,[1] by Group of Commodities, for Selected Periods

[1926=100]

Year and month	All commodities [2]	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products [2]	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semi-manufactured articles	Manufactured products [2]	All commodities except farm products [2]	All commodities except farm products and foods [2]
Average	69.8	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.1	93.1	68.8	74.9	69.4	69.0	70.0
July	67.3	71.4	62.9	69.7	55.3	55.7	79.1	52.9	77.9	56.7	88.1	67.3	67.8	66.9	65.7	65.7
November	136.3	150.3	128.6	131.6	142.6	114.3	143.5	101.8	178.0	99.2	142.3	138.8	162.7	130.4	131.0	129.9
May	167.2	169.8	147.3	193.2	188.3	159.8	155.5	164.4	173.7	143.3	176.5	163.4	253.0	157.8	165.4	170.6
Average	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	97.5	93.9	94.5	93.3	91.6
Average	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	55.1	59.3	70.3	68.3	70.2
Average	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	70.2	77.0	80.4	79.5	81.3
August	75.0	61.0	67.2	92.7	67.8	72.6	93.2	89.6	74.2	85.6	73.3	66.5	74.5	79.1	77.9	80.1
Average	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	71.9	79.1	81.6	80.8	83.0
Average	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	83.5	86.9	89.1	88.3	89.0
December	93.6	94.7	90.5	114.8	91.8	78.4	103.3	107.8	90.4	101.1	87.6	92.3	90.1	94.6	93.3	93.7
Average	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	100.6	92.6	98.6	97.0	95.5
Average	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	112.1	92.9	100.1	98.7	96.9
Average	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	113.2	94.1	100.8	99.6	98.5
Average	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	116.8	95.9	101.8	100.8	99.7
August	105.7	126.9	106.4	118.0	99.6	84.8	104.7	117.8	95.3	104.5	94.8	116.3	95.5	101.8	100.9	99.9
Average	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100 3	134.7	110.8	116.1	114.9	109.5
June	112.9	140.1	112.9	122.4	109.2	87.8	112.2	129.9	96.4	110.4	98.5	126.3	105.7	107.3	106.7	105.6
November	139.7	169.8	165.4	172.5	131.6	94.5	130.2	145.5	118.9	118.2	106.5	153.4	129.1	134.7	132.9	120.7
Average	152.1	181.2	168.7	182.4	141.7	108.7	145.0	179.7	127.3	131.1	115.5	165.6	148.5	146.0	145.5	135.2
September	157.4	186.4	179.2	185.6	142.4	114.2	150.1	183.4	122.3	131.3	115.9	170.9	150.5	151.8	150.8	138.3
October	158.5	189.7	177.7	193.1	143.4	116.1	150.5	185.8	128.6	132.4	117.1	175.2	152.6	151.2	151.5	140.1
November	159.6	187.9	177.9	202.5	145.2	118.2	150.8	187.7	135.8	137.5	118.8	175.5	154.9	152.4	153.1	142.1
December	163.2	196.7	178.4	203.4	148.0	124.6	151.5	191.0	135.0	139.4	121.5	182.0	156.5	154.9	155.6	145.5
January	165.7	199.2	179.9	200.3	148.4	130.0	154.3	193.3	138.8	141.3	123.6	183.9	156.8	157.8	158.2	148.3
February	160.9	185.3	172.4	192.8	148.9	130.8	155.3	192.7	134.6	141.8	120.1	174.9	155.2	154.5	155.3	147.6
March	161.4	186.0	173.8	185.4	149.8	130.9	155.9	193.1	136.1	142.0	120.8	174.7	152.9	155.8	155.7	147.7
April	162.8	186.7	176.7	186.1	150.3	131.6	157.2	195.0	136.2	142.3	121.8	175.5	154.1	157.6	157.3	148.7
May	163.9	189.1	177.4	188.4	150.2	132.6	157.1	196.4	134.7	142.6	121.5	177.6	153.8	158.5	158.2	149.1
June	166.2	196.0	181.4	187.7	149.6	133.1	158.5	196.8	135.8	143.2	121.5	182.6	154.5	159.6	159.4	149.5
July	•168.7	195.2	188.3	189.2	•149.4	135.7	162.2	•199.9	134.4	144.5	120.3	•184.3	155.9	•162.6	•162.6	•151.1
August	•169.5	•191.0	189.5	188.4	•148.9	136.6	•171.0	•203.6	132.0	145.4	•119.7	182.0	159.7	•164.6	•164.6	•153.1
September	168.5	189.1	186.3	187.5	147.8	136.7	171.9	203.9	133.3	146.1	119.9	180.5	158.8	163.8	163.8	153.2

BLS wholesale price data, for the most part, represent prices in primary kets. They are prices charged by manufacturers or producers or are es prevailing on organized exchanges. The weekly index is calculated n 1-day-a-week prices; the monthly index from an average of these es. Monthly indexes for the last 2 months are preliminary.

he indexes currently are computed by the fixed base aggregate method, h weights representing quantities produced for sale in 1929–31. (For a iled description of the method of calculation see "Revised Method of culation of the Bureau of Labor Statistics Wholesale Price Index," in Journal of the American Statistical Association, December 1937.)

ecause of past differences in the method of computation, the weekly and nthly indexes should not be compared directly. The weekly index is useful only to indicate week-to-week changes and to provide later data on price movements. It is not revised to take account of more complete reports.

Mimeographed tables are available, upon request to the Bureau, giving monthly indexes for major groups of commodities since 1890 and for subgroups and economic groups since 1913. Weekly indexes have been prepared since 1932.

[2] Includes current motor vehicle prices beginning with October 1946. The rate of production of motor vehicles in October 1946 exceeded the monthly average rate of civilian production in 1941, and in accordance with the announcement made in September 1946, the Bureau introduced current prices for motor vehicles in the October calculations. During the war, motor vehicles were not produced for general civilian sale and the Bureau carried April 1942 prices forward in each computation through September 1946.

• Corrected.

TABLE D–8: Indexes of Wholesale Prices,[1] by Group of Commodities, by Weeks

[Indexes 1926=100. Not directly comparable with monthly data. See footnote 1, table D–7]

Week ending	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semi-manufactured products	Manufactured products	All commodities except farm products	All commodities except farm products and foods
1948																
7	169.2	193.6	190.0	188.5	148.1	136.9	169.2	201.6	132.0	146.4	118.2	184.3	158.8	164.3	163.8	152.4
14	169.0	190.4	190.3	188.3	147.8	137.3	170.9	202.0	131.6	146.8	118.3	182.5	159.7	164.7	164.2	152.9
21	169 2	191.0	189.5	189.6	148.0	137.3	171.5	202.0	131.7	146.8	118.7	182.8	159.3	164.9	164.3	153.1
28	**168.4**	**189.3**	**187.8**	**189.9**	**147.7**	**137.4**	**171.7**	**202.3**	**132.2**	**146.8**	**118.4**	**181.7**	**159.0**	**164.2**	**163.8**	**153.2**
4	167.4	187.8	184.0	189.2	147.5	137.6	172.0	203.2	132.1	146.9	118.5	180.7	158.7	163.0	162.8	153.3
11	168.0	188.1	185.9	188.8	147.5	137.6	172.0	203.1	133.2	147.7	119.9	180.9	158.6	163.9	163.4	153.4
18	169.2	190.1	189.9	188.2	147.2	137.7	172.4	203.2	132.5	147.8	120.3	182.0	158.6	165.7	164.7	153.7
25	168.7	190.8	187.8	187.9	146.7	137.8	171.8	202.9	133.5	147.8	119.3	182.4	158.3	164.4	163.8	153.3
2	167.1	186.4	183.9	187.9	146.5	138.2	171.8	203.1	133.6	147.9	119.1	179.7	158.5	163.1	162.8	153.4
9	164.6	181.5	178.0	187.8	146.9	138.3	171.9	202.7	133.5	148.5	118.4	176.7	158.3	160.5	160.8	153.3
16	**164.8**	**182.2**	**178.0**	**187.6**	**146.8**	**138.1**	**172.5**	**203.6**	**134.4**	**148.6**	**118.7**	**177.2**	**158.3**	**160.6**	**160.9**	**153.5**
23	165.3	183.8	178.8	186.0	146.2	138.1	172.6	203.7	133.2	148.9	118.6	178.2	158.1	160.9	161.1	153.4
30	163.8	180.7	174.8	187.4	145.7	138.0	172.7	203.5	134.3	149.2	119.0	176.2	158.2	159.4	160.0	153.4

[1] See footnote 1, table D–7.

TABLE D–9: Indexes of Wholesale Prices,[1] by Group and Subgroup of Commodities

[1926=100]

Group and subgroup	1948									1947				1946	
	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	June	A
All commodities [2]	168.5	• 169.5	• 168.7	166.2	163.9	162.8	161.4	160.9	165.7	163.2	159.6	158.5	157.4	112.9	
Farm products	189.1	• 191.0	195.2	196.0	189.1	186.7	186.0	185.3	199.2	196.7	187.9	189.7	186.4	140.1	
Grains	176.9	179.2	190.6	209.2	213.5	217.9	218.0	220.0	256.3	252.7	245.5	241.4	230.3	151.8	
Livestock and poultry	244.2	250.0	250.8	239.2	219.0	204.4	209.4	210.0	232.9	226.3	211.0	224.5	224.8	137.4	
Other farm products	158.2	157.8	161.9	165.4	163.3	166.4	162.2	159.9	162.4	162.5	157.2	153.7	150.3	137.5	
Foods	186.3	189.5	188.3	181.4	177.4	176.7	173.8	172.4	179.9	178.4	177.9	177.7	179.2	112.9	
Dairy products	179.9	185.1	182.9	181.3	176.6	181.0	179.8	184.8	183.9	183.5	175.9	167.3	170.6	127.3	
Cereal products	153.3	154.0	154.5	155.1	156.3	158.0	158.6	160.2	170.1	170.6	172.1	166.7	158.2	101.7	
Fruits and vegetables	139.4	• 140.5	151.2	147.7	147.0	148.6	145.7	144.5	140.7	135.4	135.5	130.8	130.1	136.1	
Meats	266.5	273.7	263.8	241.3	233.2	226.0	217.1	206.2	222.3	214.8	217.6	230.0	244.8	110.1	
Other foods	147.0	• 146.9	148.5	148.1	144.2	144.4	144.3	146.7	155.0	160.0	159.4	157.2	150.7	98.1	
Hides and leather products	187.5	188.4	189.2	187.7	188.4	186.1	185.4	192.8	200.3	203.4	202.5	193.1	185.6	122.4	
Shoes	190.0	189.4	186.3	185.8	185.6	191.7	193.8	194.7	194.3	190.7	187.0	180.6	176.8	129.5	
Hides and skins	210.6	212.1	220.3	215.2	218.0	199.3	186.2	207.2	238.9	256.9	263.2	243.7	221.1	121.5	
Leather	181.9	186.0	189.2	186.9	188.2	183.6	185.9	199.6	209.4	217.2	216.9	205.0	197.4	110.7	
Other leather products	148.6	148.6	149.9	150.9	150.9	143.3	143.8	143.8	143.8	141.8	141.3	139.6	139.5	115.2	
Textile products	147.8	• 148.9	• 149.4	149.6	150.2	150.3	149.8	148.9	148.4	148.0	145.2	143.4	142.4	109.2	
Clothing	148.1	• 148.3	• 148.3	145.2	145.8	145.8	144.6	144.7	143.4	137.8	137.1	136.2	135.9	120.3	
Cotton goods	199.8	205.3	209.3	213.1	217.8	219.2	218.3	214.9	214.8	213.7	209.3	204.7	202.5	139.4	
Hosiery and underwear	104.8	104.9	104.9	105.3	105.4	105.4	105.4	105.0	104.4	103.0	101.4	100.0	99.9	75.8	
Rayon	41.8	41.6	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.0	37.0	37.0	37.0	30.2	
Silk	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	73.3	73.3	71.2	68.3	(3)	
Woolen and worsted goods	150.0	149.4	147.5	147.5	147.5	147.5	145.7	143.0	141.9	139.6	134.9	134.3	133.8	112.7	
Other textile products	188.7	186.6	184.5	183.1	174.2	170.0	174.7	180.2	181.2	178.3	174.9	175.6	175.0	112.3	
Fuel and lighting materials	136.7	136.6	135.7	133.1	132.6	131.6	130.9	130.8	130.0	124.6	118.2	116.1	114.2	87.8	
Anthracite	136.5	• 136.0	131.6	127.1	125.5	124.6	124.6	124.5	124.2	123.4	123.4	123.1	122.5	106.1	
Bituminous coal	195.0	194.5	• 193.1	182.6	181.8	178.9	177.9	177.9	176.8	174.3	173.7	172.6	170.3	132.8	
Coke	217.5	217.4	212.3	206.6	205.4	197.5	190.6	190.6	190.6	183.4	182.2	182.0	181.9	133.5	
Electricity	(3)	(3)	66.4	65.7	65.4	66.1	65.7	66.6	66.4	66.5	66.3	64.9	65.2	67.2	
Gas	(3)	86.9	90.4	90.7	89.3	89.1	88.7	85.8	84.5	85.4	83.6	86.8	87.0	79.6	
Petroleum and products	122.2	122.1	122.1	122.1	122.1	121.8	121.8	121.7	120.7	112.0	99.9	96.5	93.7	64.0	
Metals and metal products [2]	171.9	• 171.0	162.2	158.5	157.1	157.2	155.9	155.3	154.3	151.5	150.8	150.5	150.1	112.2	
Agricultural machinery and equipment [4]	140.2	• 135.6	134.1	132.2	130.5	129.8	129.3	128.9	128.6	127.0	125.5	122.8	121.6	104.5	
Farm machinery [4]	142.5	• 137.7	136.3	134.1	132.1	131.3	130.8	130.4	130.0	128.6	127.0	124.1	122.8	104.9	
Iron and steel	163.9	• 163.2	153.2	149.4	148.9	149.4	147.7	146.3	144.6	140.2	139.5	139.3	139.0	110.1	
Motor vehicles [4]	175.0	• 174.1	168.2	163.9	161.7	161.6	161.6	161.6	161.6	160.8	160.3	159.9	159.4	135.5	
Nonferrous metals	166.4	165.9	153.7	152.1	150.0	149.8	146.8	146.8	145.5	143.0	142.2	142.0	142.0	99.2	
Plumbing and heating	156.8	• 153.7	145.3	145.3	143.2	138.7	138.7	138.7	138.8	136.1	136.1	136.1	136.0	106.0	
Building materials	203.9	• 203.6	• 199.4	196.8	196.4	195.0	193.1	192.7	193.3	191.0	187.7	185.8	183.4	129.9	
Brick and tile	158.9	158.6	157.9	153.3	152.8	152.5	151.6	151.1	150.9	148.8	148.1	146.4	145.4	121.3	
Cement	133.3	• 133.2	132.2	128.8	128.2	127.5	127.4	127.2	126.5	121.6	120.6	120.1	119.1	102.6	
Lumber	317.1	• 319.5	• 318.1	313.2	312.9	309.2	303.8	303.8	307.3	303.2	296.0	290.2	286.5	176.0	
Paint and paint materials	159.5	• 158.1	• 157.9	158.7	158.4	158.6	156.7	159.6	163.2	164.0	161.8	160.7	157.1	108.6	
Plumbing and heating	156.8	• 153.7	145.3	145.3	143.2	138.7	138.7	138.7	138.8	136.1	136.1	136.1	136.0	106.0	
Structural steel	178.8	178.8	159.6	153.3	153.3	155.8	155.8	149.4	143.0	143.0	143.0	143.0	143.0	120.1	
Other building materials	174.8	• 173.4	• 167.1	163.5	163.1	162.2	161.8	159.8	157.9	155.5	152.6	152.5	150.7	118.4	
Chemicals and allied products	133.3	132.0	134.4	135.8	134.7	136.2	136.1	134.6	138.8	135.0	135.8	128.6	122.3	96.4	
Chemicals	126.0	126.3	127.8	126.2	125.9	126.8	126.8	126.5	125.8	124.1	124.3	122.1	118.2	98.0	
Drug and pharmaceutical materials	152.7	153.3	153.6	153.7	153.3	153.8	154.4	154.3	154.4	154.9	151.1	137.5	136.6	109.4	
Fertilizer materials	116.2	114.9	115.0	113.9	115.0	115.2	114.9	115.1	115.7	114.4	112.4	111.5	109.8	82.7	
Mixed fertilizers	107.8	105.9	104.4	103.2	103.2	103.1	103.1	102.8	102.4	101.5	100.8	97.7	97.2	86.6	
Oils and fats	188.6	180.3	193.2	212.7	205.0	212.3	211.4	201.5	236.7	215.9	226.7	193.4	163.3	102.1	
Housefurnishing goods	146.1	145.4	144.5	143.2	142.6	142.3	142.0	141.8	141.3	139.4	137.5	132.4	131.3	110.4	
Furnishings	150.8	149.3	148.6	146.7	145.8	145.2	144.7	144.4	143.8	142.8	140.5	139.4	138.5	114.5	
Furniture [4]	141.4	141.6	140.4	139.9	139.6	139.6	139.4	139.4	139.1	136.2	134.7	134.1	131.3	108.5	
Miscellaneous	119.9	• 119.7	120.3	121.5	121.5	121.8	120.8	120.1	123.6	121.5	118.8	117.1	115.9	98.5	
Tires and Tubes [4]	66.2	66.2	66.2	63.5	63.5	63.4	63.4	63.4	63.4	63.4	61.0	60.8	60.8	65.7	
Cattle feed	201.7	198.4	239.6	292.4	291.1	296.9	284.2	262.0	336.0	308.2	282.7	280.5	287.2	197.8	
Paper and pulp	170.9	169.0	166.8	167.3	167.4	167.5	167.3	167.4	168.1	164.7	160.7	159.8	159.5	115.6	
Rubber, crude	46.4	48.1	49.6	47.1	47.6	46.7	42.3	42.7	44.7	44.5	49.3	43.0	36.4	46.2	
Other miscellaneous	132.1	132.2	130.0	129.8	129.7	130.2	130.2	130.8	130.7	130.0	128.5	126.6	124.6	101.0	

[1] See footnote 1, table D–7.
[2] See footnote 2, table D–7.
[3] Not available.
[4] Revised.
• Correct

: Work Stoppages

TABLE E–1: Work Stoppages Resulting From Labor-Management Disputes [1]

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
6–39 (average)	2,862		1,130,000		16,900,000	0.27
5	4,750		3,470,000		38,000,000	.47
6	4,985		4,600,000		116,000,000	1.43
7	3,693		2,170,000		34,600,000	.41
7: September	219	435	79,200	187,000	1,970,000	.28
October	219	393	64,300	171,000	1,780,000	.23
November	178	328	57,200	139,000	829,000	.13
December	119	236	32,300	56,900	590,000	.08
8: January [2]	175	250	75,000	100,000	1,000,000	.1
February [2]	200	300	70,000	110,000	725,000	.1
March [2]	225	350	500,000	550,000	6,000,000	.8
April [2]	275	400	175,000	625,000	8,000,000	1.1
May [2]	275	425	165,000	350,000	4,100,000	.6
June [2]	310	475	165,000	240,000	2,000,000	.3
July [2]	335	525	225,000	300,000	2,200,000	.3
August [2]	335	525	150,000	225,000	1,750,000	.2
September [2]	250	450	160,000	275,000	2,400,000	.3

[1] All known work stoppages, arising out of labor-management disputes, volving six or more workers and continuing as long as a full day or shift included in reports of the Bureau of Labor Statistics. Figures on "work- involved" and "man-days idle" cover all workers made idle in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

[2] Preliminary estimates.

: Building and Construction

TABLE F–1: Expenditures for New Construction [1]

[Value of work put in place]

Type of construction	Expenditures (in millions)														
	1948										1947			1947	1946
	Oct.[2]	Sept.[3]	Aug.[3]	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Total	Total
tal new construction [4]	$1,704	$1,783	$1,799	$1,715	$1,616	$1,461	$1,311	$1,166	$1,009	$1,157	$1,320	$1,432	$1,497	$13,977	$10,458
ivate construction	1,265	1,336	1,354	1,318	1,235	1,120	1,024	940	837	948	1,097	1,141	1,129	10,893	8,253
Residential building (nonfarm)	660	685	695	680	635	585	525	475	400	500	610	630	590	5,260	3,183
Nonresidential building (nonfarm) [5]	328	334	332	324	305	277	264	266	265	273	284	287	275	3,131	3,346
Industrial	114	113	111	110	110	111	116	120	125	130	134	136	137	1,702	1,689
Commercial	114	123	127	125	116	97	87	88	84	85	91	93	82	835	1,110
Warehouses, office and loft buildings	35	35	34	29	28	25	23	22	22	24	22	19	14	216	309
Stores, restaurants, and garages	79	88	93	96	88	72	64	66	62	61	69	74	68	619	801
Other nonresidential building	100	98	94	89	79	69	61	58	56	58	59	58	56	594	547
Religious	25	25	23	21	18	16	14	13	12	13	13	13	13	118	72
Educational	25	25	24	22	19	17	16	15	15	16	17	17	17	164	115
Hospital and institutional	11	10	10	10	10	10	9	9	9	9	9	9	8	107	81
Remaining types [6]	39	38	37	36	32	26	22	21	20	20	20	19	18	205	279
Farm construction	39	63	82	81	62	50	37	23	14	14	15	25	50	450	350
Public utilities	238	254	245	233	233	208	198	176	158	161	188	199	214	2,052	1,374
Railroad	34	36	36	33	30	26	25	23	21	24	28	30	32	318	258
Telephone and telegraph	55	65	57	55	63	60	63	54	48	45	55	53	59	510	305
Other public utilities	149	153	152	145	140	122	110	99	89	92	105	116	123	1,224	811
ublic construction	439	447	445	397	381	341	287	226	172	209	223	291	368	3,084	2,205
Residential building	4	5	5	5	5	5	6	5	6	9	8	8	9	182	369
Nonresidential building (other than military or naval facilities)	106	102	96	88	79	77	71	65	49	53	52	50	53	505	325
Industrial [7]	2	2	2	2	2	2	2	1	1	1	0	0	1	25	84
Educational	58	56	52	48	43	40	37	36	30	32	32	29	27	275	101
Hospital and institutional	24	23	22	18	15	15	13	10	7	7	8	8	9	81	85
All other nonresidential	22	21	20	20	19	20	19	18	11	13	12	13	16	124	55
Military and naval facilities	13	13	13	12	11	13	13	12	11	14	17	19	23	204	188
Highways	180	190	200	169	167	136	98	57	41	56	65	119	178	1,233	772
Sewer and water	47	44	41	41	40	39	38	33	25	27	28	32	35	331	194
Miscellaneous public-service enterprises [8]	9	10	9	10	10	11	9	9	6	8	8	10	11	117	87
Conservation and development	64	66	65	58	56	47	41	36	28	33	36	41	45	396	240
All other public [9]	16	17	16	14	13	13	11	9	6	9	9	12	14	116	30

[1] Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Office of Domestic Commerce, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the tabulations for urban building authorized and the data on value of contract awards reported in table F-2.

[2] Preliminary.

[3] Revised.

[4] Includes major additions and alterations.

[5] Excludes nonresidential building by privately owned public utilities.

[6] Includes social and recreational buildings, hotels, and miscellaneous buildings not elsewhere classified.

[7] Excludes expenditures to construct facilities used in atomic energy projects.

[8] Covers primarily publicly owned electric light and power systems and local transit facilities.

[9] Covers miscellaneous construction items such as airports, monuments, memorials, etc.

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TABLE F–2: Value of Contracts Awarded and Force-Account Work Started on Federally Financ New Construction, by Type of Construction [1]

Period	Value (in thousands)															
	Total new construction [2]	Airports [3]	Building									Conservation and development			Highways	All other
			Total	Residential	Nonresidential							Total	Reclamation	River, harbor, and flood control		
					Total	Educational [4]	Hospital and institutional			Administration and general [5]	Other nonresidential					
							Total	Veterans'	Other							
1936	$1,533,439	(7)	$561,394	$63,465	$497,929	(8)	(8)	(8)	(8)	(8)	(8)	$189,710	$73,797	$115,913	$511,685	$270,9
1939	1,586,604	$4,753	669,222	231,071	438,151	(8)	(8)	(8)	(8)	(8)	(8)	225,423	115,612	109,811	355,701	331,5
1942	7,775,497	579,176	6,130,389	549,472	5,580,917	(8)	(8)	(8)	(8)	(8)	(8)	217,795	150,708	67,087	347,988	800,1
1946	1,450,252	14,859	549,656	435,453	114,203	(8)	(8)	(8)	(8)	(8)	(8)	300,405	169,253	131,152	535,784	49,9
1947	1,294,069	24,645	276,514	51,186	225,328	$47,692	$101,831	$96,123	$5,708	$31,159	$44,646	308,029	77,095	230,934	657,087	27,7
1947: September	89,262	1,109	5,153	409	4,744	1,155	249	217	32	2,565	775	22,197	1,699	20,498	59,827	9
October	111,191	4,503	7,928	586	7,342	1,198	705	668	37	1,578	3,861	20,650	3,967	16,683	73,720	4,4
November	114,096	772	16,351	711	15,640	912	9,991	9,961	30	3,506	1,231	46,049	628	45,421	49,220	1,7
December	112,388	806	32,973	104	32,869	913	26,433	26,378	55	3,332	2,191	19,541	6,928	12,613	54,349	4,7
1948: January	105,737	808	14,136	149	13,987	253	8,818	8,603	215	1,961	2,955	41,585	4,667	36,918	47,268	1,9
February	155,428	645	46,632	859	45,773	168	41,762	41,557	205	1,735	2,108	57,361	1,229	56,132	49,426	1,8
March	145,350	5,322	63,193	61	63,132	256	59,131	58,920	211	1,230	2,515	21,793	6,639	15,154	51,561	3,4
April	154,375	2,521	9,867	553	9,314	12	5,606	5,049	557	1,863	1,833	79,782	56,934	22,848	58,247	3,9
May	114,040	1,199	24,712	364	24,348	468	20,215	20,045	170	1,861	1,804	10,309	4,738	5,571	75,648	2,1
June	134,800	2,003	35,989	825	35,164	89	15,156	13,739	1,417	9,696	10,223	23,628	8,877	14,751	68,486	4,6
July	137,730	1,578	9,944	254	9,690	0	6,691	1,493	5,198	1,185	1,814	41,546	1,327	40,219	78,428	6,2
August [9]	123,433	1,997	6,384	120	6,264	2	4,402	872	3,530	887	973	21,982	4,269	17,713	91,305	1,7
September [10]	113,641	(8)	17,504	66	17,438	31	13,359	13,178	181	1,985	2,063	27,080	2,959	24,121	65,916	3,1

[1] Excludes projects classified as "secret" by the military, and all construction for the Atomic Energy Commission. Data for Federal-aid programs cover amounts contributed by both the owner and the Federal Government.
[2] Includes major additions and alterations.
[3] Excludes hangars and other buildings, which are included under "Other nonresidental" building construction.
[4] Includes educational facilities under the Federal temporary reuse educational facilities program.
[5] Includes post offices, armories, offices, and customs houses.
[6] Includes electrification projects, water-supply and sewage-disposal systems, forestry projects, railroad construction, and other types of projects not elsewhere classified.
[7] Included in "All other."
[8] Unavailable.
[9] Revised.
[10] Preliminary.

ABLE F–3: Urban Building Authorized, by Principal Class of Construction and by Type of Building [1]

Period	Total all classes [2]	Valuation (in thousands)								Number of new dwelling units—Housekeeping only				
		New residential building						New nonresidential building	Additions, alterations, and repairs	Privately financed				Publicly financed
		Housekeeping					Nonhousekeeping [3]							
		Privately financed dwelling units				Publicly financed dwelling units				Total	1-family	2-family [4]	Multifamily [5]	
		Total	1-family	2-family [4]	Multifamily [5]									
2	$2,707,573	$598,570	$478,658	$42,629	$77,283	$296,933	$22,910	$1,510,688	$278,472	184,892	138,908	15,747	30,237	95,946
6	4,743,414	2,114,833	1,830,260	103,042	181,531	355,587	43,369	1,458,602	771,023	430,195	358,151	24,326	47,718	98,310
7	5,549,718	2,880,926	2,361,509	156,408	363,009	35,177	29,831	1,712,672	891,112	501,353	393,550	34,159	73,644	5,109
7: August	567,979	297,022	238,222	16,432	42,368	1,604	2,966	182,041	84,346	51,121	39,233	3,521	8,367	192
September	561,536	303,186	251,286	14,780	37,120	2,229	4,080	162,234	89,807	51,877	40,834	2,992	8,051	275
October	604,165	340,627	275,691	18,032	46,904	3,795	3,450	168,334	87,957	55,870	42,825	3,536	9,509	460
November	501,556	256,728	201,262	15,724	39,742	6,519	5,620	166,472	66,217	41,010	30,284	3,316	7,410	865
December	479,881	227,675	179,806	11,951	35,918	2,992	2,284	177,315	69,615	26,088	20,596	2,443	7,049	364
8: January	426,531	198,698	150,879	11,501	36,318	6,616	3,224	152,086	65,907	32,523	23,704	2,280	6,539	820
February	414,339	202,050	146,934	8,954	46,162	9,237	1,441	141,188	60,423	32,166	22,180	1,863	8,123	1,125
March	631,621	321,562	252,778	20,016	48,768	597	4,082	222,565	82,815	50,788	37,520	4,092	9,176	85
April	714,954	411,300	317,892	34,372	59,036	1,960	6,166	196,095	99,433	64,387	45,700	6,997	11,690	254
May	657,480	349,949	291,208	17,895	40,846	5,393	2,729	205,619	93,790	52,811	41,423	3,769	7,619	733
June	699,657	365,656	301,598	16,432	47,626	3,350	4,711	219,962	105,978	54,112	42,106	3,327	8,679	439
July [6]	650,119	320,797	264,509	15,899	40,389	10,969	3,167	219,598	95,588	46,573	36,661	2,971	6,941	1,260
August [7]	645,816	347,869	263,890	13,292	70,687	7,760	3,186	193,374	93,627	46,706	35,816	2,296	8,594	896

[1] Building for which building permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits.

The data cover federally and non-federally financed building construction combined. Estimates of non-Federal (private, and State and local government) urban building construction are based primarily on building-permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies. Data from building permits are not adjusted to allow for lapsed permits or for lag between permit issuance and the start of construction. Thus, the estimates do not represent construction actually started during the month.

Urban, as defined by the Bureau of the Census, covers all incorporated places of 2,500 population or more in 1940, and, by special rule, a small number of unincorporated civil divisions.

[2] Covers additions, alterations, and repairs, as well as new residential and nonresidential building.

[3] Includes units in 1-family and 2-family structures with stores.

[4] Includes units in multifamily structures with stores.

[5] Covers hotels, dormitories, tourist cabins, and other nonhousekeeping residential buildings.

[6] Revised.

[7] Preliminary.

TABLE F-4: New Nonresidential Building Authorized in All Urban Places,[1] by General Type and Geographic Division [2]

Geographic division and type of new nonresidential building	Valuation (in thousands)														
	1948								1947					1947	194
	Aug. [3]	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	Total	Tota
All types	$193,374	$219,598	$219,962	$205,619	$196,095	$222,565	$141,188	$152,086	$177,315	$166,472	$168,334	$162,234	$182,041	$1,712,674	$1,458,
New England	10,532	15,340	20,512	10,142	10,279	8,956	5,236	26,689	6,307	14,753	12,395	10,949	6,541	109,831	10
Middle Atlantic	32,532	30,752	32,431	50,897	27,338	55,770	20,497	9,305	42,529	23,513	21,465	18,845	40,322	271,742	196,
East North Central	49,357	57,717	55,231	37,567	45,082	33,614	26,458	21,268	29,084	36,414	44,187	36,338	49,539	372,866	338,
West North Central	17,026	12,114	13,671	12,079	14,985	16,434	16,566	8,813	19,008	12,263	13,476	12,217	10,752	132,163	112,
South Atlantic	17,104	34,905	24,933	19,745	22,840	25,267	14,562	18,547	21,403	15,958	19,182	17,751	16,321	200,042	171,
East South Central	8,649	6,392	8,682	7,798	6,176	9,902	3,928	7,152	7,327	5,076	6,159	6,175	6,936	73,138	65,
West South Central	14,885	25,965	20,319	24,584	21,805	21,558	27,433	27,121	17,925	26,079	15,366	19,454	11,915	193,072	132,
Mountain	8,567	7,778	4,429	7,818	6,240	8,724	3,826	2,761	4,067	3,828	5,449	6,039	9,646	58,162	40,
Pacific	34,722	28,636	39,754	34,989	41,350	42,340	22,682	30,460	29,669	28,590	30,657	34,424	30,071	301,658	266,
Industrial buildings [4]	26,828	24,387	32,832	26,233	26,899	32,910	16,883	17,453	33,524	22,702	25,194	27,806	40,407	321,847	307,
New England	546	3,526	2,365	2,360	971	1,806	1,051	803	1,642	2,601	1,920	2,504	892	25,952	19,
Middle Atlantic	7,003	5,155	4,938	8,375	7,518	6,823	3,699	2,250	7,053	3,067	4,963	4,668	7,615	57,755	77,
East North Central	9,511	9,217	15,602	7,997	9,262	9,513	3,859	5,477	10,137	9,012	9,342	9,538	21,767	118,666	132,
West North Central	1,957	713	2,039	908	3,081	1,728	1,205	971	1,781	1,384	1,671	2,010	3,078	19,890	29,
South Atlantic	1,670	1,180	2,159	1,496	1,519	4,469	1,640	1,927	3,851	1,410	1,714	1,304	1,315	20,549	34,
East South Central	1,023	452	1,465	691	225	1,088	330	466	1,489	981	717	1,557	1,207	13,573	14,
West South Central	1,800	1,836	1,023	1,316	760	2,409	1,637	1,641	2,666	1,456	1,282	1,516	1,657	17,519	12,
Mountain	120	65	248	147	79	383	119	380	181	359	257	504	200	2,852	4,
Pacific	3,198	2,243	2,993	2,943	3,484	4,691	3,343	3,568	4,724	2,432	3,328	4,205	2,676	45,091	70,
Commercial buildings [5]	79,526	92,057	82,407	84,424	83,852	82,366	47,315	72,617	65,591	66,927	78,647	82,681	69,641	686,920	669,
New England	4,718	5,780	7,307	3,275	3,401	2,547	1,257	12,431	1,804	3,367	4,203	4,233	3,294	32,853	43,
Middle Atlantic	12,884	13,177	13,508	10,550	11,506	12,753	5,411	5,412	13,222	8,114	10,739	7,641	9,780	90,725	74,
East North Central	15,725	17,174	17,903	14,660	15,198	10,010	7,891	10,188	11,518	13,767	15,739	14,846	17,196	119,958	119,
West North Central	7,128	6,575	4,647	6,022	5,692	8,286	2,586	5,171	6,885	5,215	5,960	6,342	4,585	57,240	51,
South Atlantic	10,426	13,501	10,361	11,923	13,498	9,118	8,170	7,445	7,949	7,721	10,423	11,353	10,031	106,788	87,
East South Central	3,864	3,202	3,232	3,375	3,891	3,245	2,027	4,172	1,978	2,582	3,619	2,997	3,821	34,680	34,
West South Central	7,076	12,324	8,120	13,455	10,441	10,917	8,062	12,036	8,705	8,292	9,968	11,651	6,477	91,548	82,
Mountain	4,965	4,192	2,761	3,275	3,747	4,998	2,093	1,484	1,651	2,753	2,950	3,370	2,431	26,855	26,
Pacific	12,740	16,132	14,568	17,889	16,478	20,492	9,818	14,278	11,879	15,116	15,046	20,248	12,026	126,273	150,
Community buildings [6]	57,005	67,786	66,074	66,775	51,410	78,226	58,666	34,404	49,975	48,969	37,262	23,340	49,750	406,890	190,
New England	4,137	3,443	8,780	3,457	4,255	3,477	1,465	5,944	938	5,110	4,214	788	1,437	25,759	19,
Middle Atlantic	9,095	8,658	8,753	26,082	4,373	32,780	10,049	666	20,629	10,419	2,418	4,538	20,718	80,190	21,
East North Central	13,383	21,303	14,105	10,354	13,954	8,707	10,989	2,623	4,336	5,355	9,798	3,553	3,802	62,541	42,
West North Central	3,521	2,736	3,994	2,528	2,665	3,796	11,998	787	7,752	3,760	4,174	1,410	1,549	34,639	19,
South Atlantic	3,869	10,567	6,508	2,887	4,761	9,623	3,341	7,570	3,617	5,151	5,149	2,991	3,659	40,161	22,
East South Central	2,409	2,294	2,591	2,931	1,243	1,134	675	1,757	3,239	709	1,427	1,111	974	16,895	12,
West South Central	4,481	9,545	8,835	7,999	7,359	6,463	16,591	11,007	4,313	13,456	2,907	4,193	2,218	65,309	25,
Mountain	2,578	2,825	566	3,907	1,299	2,778	608	409	1,270	392	1,659	1,117	5,212	18,366	5,
Pacific	13,532	6,415	11,942	6,630	11,501	9,468	2,950	3,641	3,881	4,617	5,516	3,639	10,181	63,030	20,
Public buildings [7]	5,155	5,629	14,736	4,296	5,508	7,055	5,323	5,577	4,556	4,920	1,767	3,744	3,398	40,699	12,
New England	100	55	613	90	121	455	1,250	2,289	502	834	355	0	77	3,418	3,
Middle Atlantic	498	337	2,463	1,147	659	488	112	214	219	200	3	10	324	4,712	1,
East North Central	3,385	3,700	1,276	101	475	849	568	684	900	802	386	1,444	1,332	8,171	8,
West North Central	138	36	754	26	1,500	124	77	535	200	26	86	168	177	1,696	1,
South Atlantic	47	913	1,449	91	648	394	349	30	92	244	237	7	306	6,285	9,
East South Central	0	0	1,029	413	209	3,374	417	206	150	166	55	135	17	830	1,
West South Central	260	286	1,467	333	203	496	566	1,023	551	1,842	165	615	314	4,430	6,
Mountain	73	68	475	36	341	61	259	113	180	0	99	362	282	2,416	7
Pacific	654	234	5,210	2,059	1,352	814	1,725	483	1,762	806	381	1,003	569	8,741	7,
Public works and utility buildings [8]	11,871	17,846	9,306	10,167	15,639	12,715	7,483	16,284	16,942	13,105	12,128	12,889	7,452	143,827	102,
New England	290	1,736	530	119	581	309	75	5,113	1,092	2,243	741	2,723	147	15,086	15,
Middle Atlantic	1,587	1,923	1,252	3,045	1,839	1,784	671	365	576	518	1,205	608	681	24,968	10,
East North Central	3,584	3,279	2,549	1,094	2,692	2,889	2,481	1,649	1,211	5,544	5,413	3,541	2,767	35,972	23,
West North Central	3,103	882	1,082	1,055	701	1,762	459	1,035	1,803	508	552	1,036	282	8,738	6,
South Atlantic	388	7,845	3,051	2,572	1,556	592	670	1,125	5,347	872	813	1,434	346	19,046	20,
East South Central	865	193	11	86	315	702	325	410	307	413	51	125	550	4,154	9,
West South Central	413	1,494	322	669	2,099	688	208	814	1,241	411	339	740	720	7,648	5,
Mountain	334	209	8	2	238	155	575	50	499	13	0	158	1,147	3,520	1,
Pacific	1,307	285	501	1,525	5,618	3,834	2,019	5,723	4,866	2,583	3,014	2,524	812	24,695	19,
All other buildings [9]	12,989	11,893	14,607	13,724	12,787	9,293	5,518	5,751	6,729	9,851	13,338	11,772	11,395	112,491	77,
New England	741	800	917	841	950	362	138	109	329	598	962	701	694	6,764	5,
Middle Atlantic	1,466	1,502	1,517	1,698	1,443	1,142	555	398	830	1,195	2,137	1,380	1,204	13,392	9,
East North Central	3,769	3,044	3,797	3,361	3,501	1,646	670	647	982	1,934	3,509	3,416	2,675	27,556	19,
West North Central	1,179	1,172	1,155	1,540	1,346	738	241	314	587	1,370	1,033	1,251	1,081	9,961	6,
South Atlantic	704	899	1,405	776	858	1,071	392	450	547	560	846	702	664	7,213	5,
East South Central	487	251	353	302	293	359	154	141	164	225	290	250	367	3,005	2,
West South Central	854	480	552	812	943	585	369	600	447	622	705	739	529	6,618	5,
Mountain	497	419	371	451	536	349	172	325	286	311	484	528	374	4,153	2,
Pacific	3,292	3,326	4,540	3,943	2,917	3,041	2,827	2,767	2,557	3,036	3,372	2,805	3,807	33,829	29,

[1] Building for which permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits. Sums of components do not always equal totals exactly because of rounding.

[2] For scope and source of urban estimates, see table F-3, footnote 1.

[3] Preliminary.

[4] Includes factories, navy yards, army ordnance plants, bakeries, ice plants, industrial warehouses, and other buildings at the site of these and similar production plants.

[5] Includes amusement and recreation buildings, stores and other mercantile buildings, commercial garages, gasoline and service stations, etc.

[6] Includes churches, hospitals, and other institutional buildings, schools, libraries, etc.

[7] Includes Federal, State, county, and municipal buildings, such as post offices, courthouses, city halls, fire and police stations, jails, prisons, arsenals, armories, army barracks, etc.

[8] Includes railroad, bus and airport buildings, roundhouses, radio stations, gas and electric plants, public comfort stations, etc.

[9] Includes private garages, sheds, stables and barns, and other buildings not elsewhere classified.

BLE F–5: Number and Construction Cost of New Permanent Nonfarm Dwelling Units Started, by Urban or Rural Location, and by Source of Funds [1]

Period	Number of new dwelling units started									Estimated construction cost (in thousands) [2]		
	All units			Privately financed			Publicly financed					
	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total	Privately financed	Publicly financed
[3]	937,000	752,000	185,000	937,000	752,000	185,000	0	0	0	$4,475,000	$4,475,000	0
[4]	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	0
[5]	706,100	434,300	271,800	619,511	369,499	250,012	86,589	64,801	21,788	2,825,895	2,530,765	295,130
[6]	141,800	96,200	45,600	138,692	93,216	45,476	3,108	2,984	124	495,054	483,231	11,823
	670,500	403,700	266,800	662,473	395,673	266,800	8,027	8,027	0	3,769,767	3,713,776	55,991
	849,000	479,800	369,200	845,560	476,360	369,200	3,440	3,440	0	5,642,798	5,617,425	25,373
First quarter	138,100	81,000	57,100	137,016	79,916	57,100	1,084	1,084	0	808,263	800,592	7,671
January	39,300	24,200	15,100	38,216	23,116	15,100	1,084	1,084	0	223,577	215,906	7,671
February	42,800	25,000	17,800	42,800	25,000	17,800	0	0	0	244,425	244,425	0
March	56,000	31,800	24,200	56,000	31,800	24,200	0	0	0	340,261	340,261	0
Second quarter	217,200	119,100	98,100	217,000	118,900	98,100	200	200	0	1,361,677	1,360,477	1,200
April	67,100	37,600	29,500	67,100	37,600	29,500	0	0	0	418,451	418,451	0
May	72,900	39,300	33,600	72,900	39,300	33,600	0	0	0	452,236	452,236	0
June	77,200	42,200	35,000	77,000	42,000	35,000	200	200	0	490,990	489,790	1,200
Third quarter	261,200	142,200	119,000	260,733	141,733	119,000	467	467	0	1,774,150	1,770,475	3,675
July	81,100	44,500	36,600	81,100	44,500	36,600	0	0	0	539,333	539,333	0
August	86,300	47,400	38,900	86,108	47,208	38,900	192	192	0	589,470	587,742	1,728
September	93,800	50,300	43,500	93,525	50,025	43,500	275	275	0	645,347	643,400	1,947
Fourth quarter	232,500	137,500	95,000	230,811	135,811	95,000	1,689	1,689	0	1,698,708	1,685,881	12,827
October	94,000	53,200	40,800	93,540	52,740	40,800	460	460	0	678,687	675,197	3,490
November	79,700	48,000	31,700	78,835	47,135	31,700	865	865	0	584,731	578,324	6,407
December	58,800	36,300	22,500	58,436	35,936	22,500	364	364	0	435,290	432,360	2,930
First quarter	177,300	101,200	76,100	174,996	99,052	75,944	2,304	2,148	156	1,287,460	1,268,661	18,799
January	52,600	30,400	22,200	51,776	29,603	22,173	824	797	27	372,657	365,886	6,771
February	49,600	28,800	20,800	48,445	27,774	20,671	1,155	1,026	129	363,421	354,218	9,203
March	75,100	42,000	33,100	74,775	41,675	33,100	325	325	0	551,382	548,557	2,825
Second quarter [8]	294,200	164,000	130,200	291,023	162,430	128,593	3,177	1,570	1,607	2,214,738	2,185,661	29,077
April	98,800	54,400	44,400	97,518	54,156	43,362	1,282	244	1,038	729,713	717,996	11,717
May [7]	99,400	56,700	42,700	97,902	55,693	42,209	1,498	1,007	491	753,661	739,605	14,056
June [8]	96,000	52,900	43,100	95,603	52,581	43,022	397	319	78	731,364	728,060	3,304
Third quarter												
July [9]	94,000	49,700	44,300	93,640	49,340	44,300	360	360	0	725,900	723,032	2,868
August [9]	83,000	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	675,654	(9)	(9)

The estimates shown here do not include temporary units, conversions, mitory accommodations, trailers, or military barracks. They do include fabricated housing units.

These estimates are based on building-permit records, which, beginning h 1945, have been adjusted for lapsed permits and for lag between permit ance and start of construction. They are based also on reports of Federal struction contract awards and beginning in 1946, on field surveys in permit-issuing places. The data in this table refer to nonfarm dwelling ts started, and not to urban dwelling units authorized, as shown in table

ll of these estimates contain some error. In 1948, for example, if the mate of nonfarm starts is 50,000, the chances are about 19 out of 20 that actual enumeration would produce a figure between 47,600 and 52,400 1946 and 1947, the range of error was approximately twice as large. The reduction was achieved by improvements in estimating and survey techniques.

[2] Private construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

[3] Housing peak year.

[4] Depression, low year.

[5] Recovery peak year prior to wartime limitations.

[6] Last full year under wartime control.

[7] Revised.

[8] Preliminary.

[9] Not available.

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